THE BRICKBVILDER
AN ARCHITECTVRAL MONTHLY

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1916

DEVOTED TO THE ART AND SCIENCE OF BVILDING

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LEON BATTISTA ALBERTI

BORN IN FLORENCE, 1404. DIED IN ROME, 1472. ARCHITECT OF CHURCHES OF SANT' ANDREA, MANTUA AND SAN FRANCESCO, RIMINI AND FACADES OF SANTA MARIA NOVELLA AND RUCELLAI PALACE, FLORENCE

THE BRICKBVILDER

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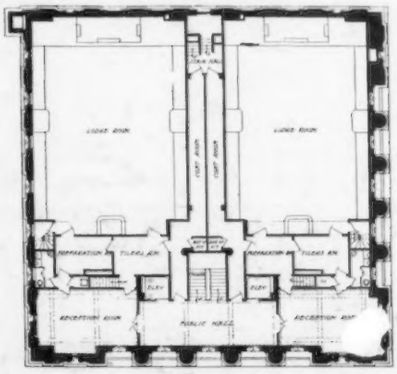
Masonic Temples

By H. P. KNOWLES

THE town hall, the court house, and the post office are usually the most prominent, or at least the best known, buildings in the majority of towns and cities throughout the country, but next to these there is probably no building more familiar than the Masonic Temple. It is the meeting place of a large number of the local citizens who are usually representative of the best in the community, or at least of the more active.

An examination of the Masonic Temples throughout the country reveals the fact that this promising field of the architect has not received the serious attention and careful study which it deserves. Considering the number of these buildings erected, it is surprising how few are deserving of consideration on the ground of architectural merit; the majority are poorly designed, poorly planned, and badly ventilated, which criticism I might say applies more especially to the temples in the smaller communities. Despite the many Masonic Temples erected and the large sums expended on them, not until recent years has careful study been given to their designing and planning.



Lodge Room Floor Plan
Masonic Temple, Brooklyn, N. Y.
Lord & Hewlett and Pell & Corbett, Associate Architects

Like other structures of a semi-public character, they are almost invariably placed in the charge of a building committee, and the Masonic building committee, like the majority of building committees, is hampered at the start by the belief that the greater the number of designs submitted for its consideration the more likely it is to secure a building that will be satisfactory to the fraternity. Unfortunately many of these competitions have not been conducted under such supervision as would induce architects of standing to compete, and the results are almost invariably distressing to all but the successful competitor. This condition applies, of course, to the majority of similar building operations, but it seems as if the buildings of fraternal societies suffered more from this complaint than any other type.

Another reason that is largely responsible for the mediocre character of a large number of the Masonic Temples in the smaller communities is the custom of limiting the selection of an architect to one or two of the local members of the profession who are members of the lodge. The result, of course, is in strong contrast to the case of a town library, for instance, where the building committee is not limited to local architects for its selection and is free to go outside of the town for talent if the local supply is not deemed sufficiently experienced.

In common with most building committees, the first question which confronts the majority of Masonic Temple building committees is the everlasting economic one: first, the wherewithal to build; and second, the reliable flow of the wherewithal to keep the building going after completion. As usual with the preliminary work involved in erecting buildings that are designed to accommodate the many, the first question is over the site. With this settled, the debate as to the character of the building to be erected begins. It must be decided whether the structure is to be a purely Masonic building or whether it shall be partly commercial — say with stores or a bank on the first floor, or perhaps a story or two of offices in the lower floors with the remaining upper portion devoted to lodge purposes. The object of the stores and offices is to afford additional revenue which with the lodge rents will provide sufficient funds to care for the upkeep of the building without burdensome taxation of the lodge members.

The partly commercial and partly Masonic type of building appeals to many; but leaving out for the present any architectural consideration, the writer's experience leads him to believe that seldom if ever is a Masonic building committee which is subject to frequent change in its makeup successful in the management of a building when outside interests have to be considered. The average Masonic building committee, which as a rule only meets at stated intervals, is not suited to the proper care of a commercial building unless it secures the services of a competent superintendent capable of dealing with the tenants and who is available at all times to look after the interests of the building and its owners. The commercialism of such a structure robs it of that private homey or clubby atmosphere which is so essential to the successful housing of a Masonic lodge.

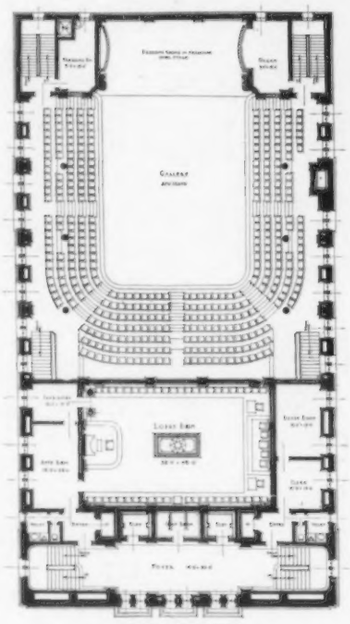
Some of the more recent Masonic structures have followed the more dignified type, that of a purely Masonic building accommodating only Masonic organizations. Such is the type of the new temples being erected in Yonkers, Schenectady, and Syracuse, N. Y., and Toronto, Canada, the latter being one of the largest and most important of the recent buildings.

A building designed to be used exclusively as a Masonic Temple should be dignified, of good proportions, built of substantial honest materials, and carefully planned to suit the purposes of the fraternity. This may well be said of any building, but it applies particularly to buildings of this class, and all those who are familiar with the teachings of Masonry and its lectures will appreciate how important this is.

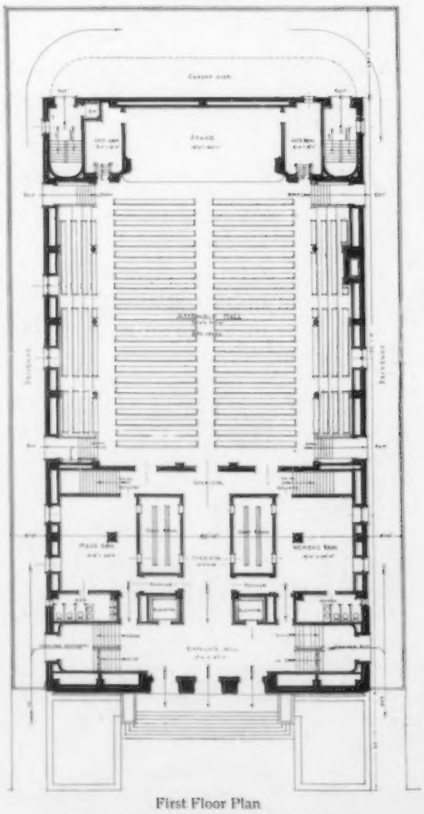
The semi-secret character of the organization and the fact that its meetings, or communications as they are called, are held in places where observation cannot be had by those not within the circle, must necessarily stamp the exterior of such a structure with a character quite in contrast with its neighbors.

Aberrations in the form of so-called Egyptian Temples have been erected to house the fraternity — buildings which look more like morgues or jails than the homes of an organization whose object is the uplift and betterment of its members. These forbidding structures are designed to emphasize the secret side of the order, giving the impression to the uninitiated that Masonry is a mysterious organization whose members participate in solemn rites and are bound together by oaths for some mysterious reason not to be divulged under the most awful penalties.

If such were its only attraction, the organization would not have existed until now, nor have wielded the influence it undoubtedly does. In reality the secret side of the order is the least important. There are obligations and signs by which one mason may know another, which are secret, of course; but as compared with the actual reasons for the order's existence, this aspect of it is insignificant and need not be considered any more in the external treatment of one of these buildings than would be the case with a club or any other similar structure where privacy is essential. The fact that few openings are needed in the outside walls and the necessary large height of the stories will stamp the building with a character sufficiently suggestive to indicate its purpose. The lodge rooms must, of course, be absolutely secure from any espionage, but the building need not be made to look like a morgue or a jail in order to guarantee this necessary privacy.



Second Floor Plan



First Floor Plan

Masonic Temple, Toronto, Ont., Canada
H. P. Knowles, Architect

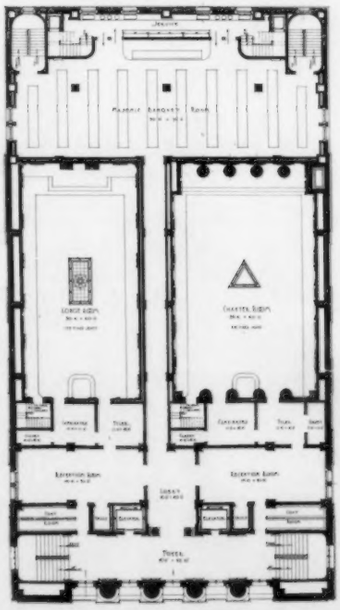
A word or two as to the meaning of Masonry may be of interest to those who have not been initiated. The Masonic fraternity came into existence several hundred years ago, but just when is a matter of discussion among Masonic authorities. The antiquarian will trace the origin of the trade unions of the Middle Ages and demonstrate beyond controversy that modern speculative Masonry is the direct lineal descendant of the traveling Masonic Guilds to which medieval Europe owes its magnificent cathedrals, monasteries, and abbeys. The philosopher will go farther and find the germ or dominant idea of modern speculative masonry in the "mysteries" or secret societies of antiquity; but undisputed records show the existence of ancient operative guilds, not unlike our modern labor unions except that they were secret in character, and only those who were in the possession of certain signs and words were able to enter their meetings. These guilds or lodges gradually developed into lodges of speculative masonry, and their doors were opened to any seeking admission who were "free born, of lawful age, and well recommended."

Masonry has been defined as a system of morality, veiled in allegory and illustrated by symbols.

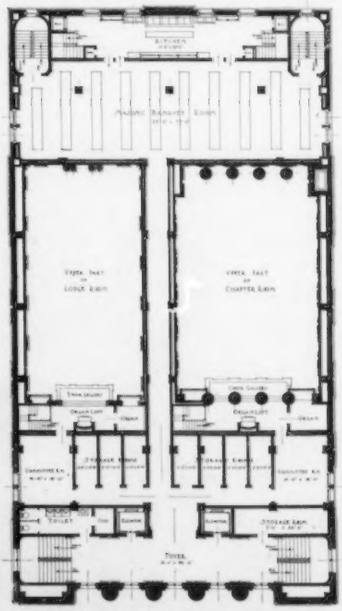
The organization has assumed large proportions, especially in English-speaking countries, although it has many adherents in almost every quarter of the world. It endeavors to spread the teachings of brotherhood, and the lectures and ritual contained in the various degrees through which the candidates must pass are so full of symbolism that the design of the temple, at least its detail, must surely bear its traces both on the exterior and interior.

It is a difficult matter to compare the home of such an organization to any other structure. It is not usually termed a religious institution, although it is founded on religious teachings. Its meeting places are not considered places of worship, although every lodge room must be furnished with an altar or pedestal on which is placed the Holy Bible, and prayers are said by the lodge chaplains and hymns sung by its members. It cannot be termed a club in the usual sense of the word, although it is an organization of men, membership in which

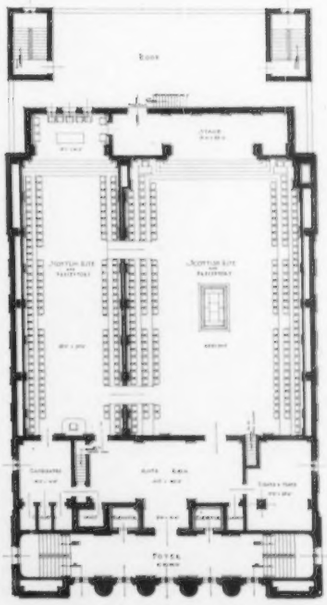
GENERAL VIEW OF EXTERIOR FROM PERSPECTIVE DRAWING



THIRD FLOOR PLAN



THIRD FLOOR MEZZANINE PLAN



FOURTH FLOOR PLAN

MASONIC TEMPLE, TORONTO, ONT., CANADA

H. P. KNOWLES, ARCHITECT

Front Elevation

First Floor Plan Second Floor Plan

Masonic Temple, Everett, Mass.
Loring & Phipps, Architects

requires that its candidates shall be regularly proposed, and for which initiation fees are charged and regular annual dues are collected. The communications or meetings are held at regular stated intervals, usually twice each month. The proceedings are carried on in accordance with strict ritualistic form prescribed by the Grand Lodge authorities. This ritualistic form, with its obligations, passwords, grips, signs, etc., is secret.

Masonry is the oldest of all secret organizations, and the majority of modern societies which initiate members with ceremonies of a secret nature will be found to have modeled these ceremonies after those of the Masonic Order.

Masonry is primarily the lodge known as Free and Accepted Masons, and from this various branches have sprung which are sometimes called the Higher Orders, and in a community which boasts a lodge there will usually be found a Chapter of Royal Arch Masons, and in the larger towns a Commandery of Knights Templars. Another branch of Masonry is the Council, which generally holds its meetings in one of the lodge rooms of the Masonic Temple. There is also a system of degrees known as Scottish Rite Masonry. This branch of the fraternity will also be found meeting in the Masonic Temple, but in the larger cities it is usually housed in an independent structure of its own, a very notable example being the beautiful Scottish Rite Temple in Washington designed by Mr. John Russell Pope. The Mystic Shrine and Grotto, allied Masonic organizations, are found only in the larger cities and occupy buildings of their own constructed especially to suit their own uses.

The average Masonic Temple for a small city of about 100,000 inhabitants will usually require two lodge rooms to accommodate seven or eight lodges, a chapter room, assembly room, banqueting room, etc.

The assembly room is generally located on the ground floor so that it may be rented for outside purposes, and it must be so arranged as not to interfere with the comfort and workings of the Masonic bodies in the balance of the building; and it usually seats from five hundred to six hundred persons, and may be with or without a gallery. If the community possesses a commandery of considerable size, this assembly room may be used as an asylum for that body; but usually in structures of this size one of the lodge rooms is sufficiently large to accommodate the commandery. This assembly room is also used for many social affairs, such as lodge entertainments, smokers, etc., which are of frequent occurrence, and the room is generally furnished with a stage and dressing rooms. It is essential that the cloak room, retiring room, and toilet-room facilities should be ample and conveniently located.

In the larger temples, the lodges, chapters, commanderies, and Scottish Rite bodies are kept entirely separate in rooms of their own. In the Toronto Masonic Temple illustrated herewith separate quarters are provided for these various branches, excepting that the commanderies, or preceptories as they are called in Canada, and the Scottish Rite bodies occupy the same rooms on the top story.

The most popular dimensions for a standard lodge room are about forty feet wide, from sixty to sixty-five feet long, and about twenty feet high in the clear.

It has been computed that the average attendance at lodge meetings is about ten per cent of the total membership; but frequently on special occasions the attendance is greatly increased, and the lodge room should be sufficiently large to accommodate seventy-five per cent of the total membership of the largest organization occupying the room.

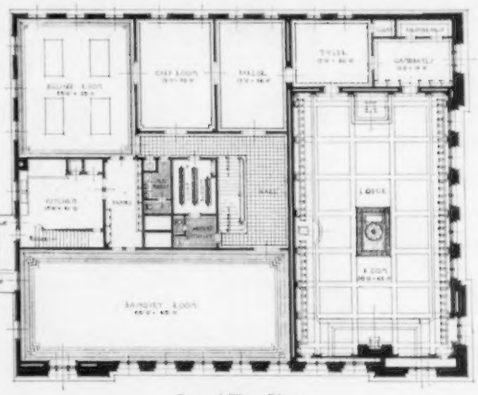
If the building is to contain more than one lodge room, they should vary in size. The largest room is usually placed on the top floor and is frequently arranged for commandery purposes as well as for the lodge. If possible this room should be surrounded with a corridor or promenade five feet wide, along which are niches or stations for guards necessary for the working of the commandery degrees or orders, as they are properly termed; along this corridor may be ranged the lockers for the Sir Knights' uniforms and other Templar equipment. The ideal layout

for this type of room will be found in a plan illustrated herewith, which will show the type of room required for a building which is to have one room in common for the lodges, chapter, and commandery as it is arranged to suit the requirements of all these bodies.

In connection with the large lodge room, if it is used for commandery purposes, there should be arranged a small room, or rather a large closet, say six feet square, called a Chamber of Reflection. This room must be made sound proof and should be located conveniently near the entrance to the main room.

The smaller lodge room is planned to meet the requirements of the smaller lodges. This room and the chapter room may be placed together on the second floor in a manner somewhat similar to the second floor of the Toronto Temple, omitting the banquet room in the rear.

The officers' stations in the lodge rooms are fixed and will be found the same throughout all jurisdiction: the master's station is on a platform at the east or main end of the room and is raised three steps above the general floor level; the senior warden's station is at the opposite or west end of the room, elevated two steps above the main floor level; the junior warden's station is placed in the center of the south or right-hand side of the room as one enters the room, one step above the general floor level. The minor officers of the lodge are placed on the main floor level; the senior deacon to the right of the master; the marshal to the left of the master; the senior and junior masters of ceremonies to the right and left of the senior warden; and the senior and junior stewards to the right and left of the junior warden. The junior deacon is placed at the entrance door on the lodge room side, and the tiler at the outside of the entrance door in the tiler's room. The master's platform should be sufficiently wide to accommodate a chaplain and a half dozen visitors. The treasurer and the secretary of the lodge are usually placed in the two corners at the master's end of the room, the treasurer on his right and the secretary on his left. The three principal stations are designated by emblems, or jewels as they are called; the master by the square; the senior warden by the level; and the junior warden by the plumb.



Second Floor Plan

Music is considered essential for the working of degrees and for the ceremonies attending the opening and closing of the lodge sessions; therefore every lodge room should be furnished with an organ, and it will be found to range from a modest little affair standing in one corner of the room to a two or three manual pipe organ. The organist and manual are usually placed back of the senior warden's chair and the organ chamber overhead on the mezzanine floor level.

Over the master's chair in every lodge room is suspended an illuminated letter "G," while in the center of the room on the main floor level is the altar which consists of an oblong structure about three feet wide, three feet high, and five feet long, surrounded with a kneeling step six or seven inches high. To indicate symbolically three points of the compass—east, west, and south—three candlesticks on standards are placed around this altar, two on the left and one on the right-hand side. The altar and these candlesticks are frequently set in a marble or mosaic panel set flush with the floor. This panel, or trestle board as it is masonically termed, is usually about six feet wide and about twelve feet long and is surrounded by an ornamented border which is of symbolical significance, and in the center is placed a "blazing star."

A switchboard controlling all the lighting of this room should be located inside the lodge room near the entrance door at the junior deacon's station, as he usually has control of all the lights. In addition to the

Masonic Temple, Colon, Panama
H. P. Knowles, Architect

usual switches for the control of various groups of lights, there must be one switch which will throw out all lights in the room excepting the lights on the candlesticks around the altar, and these are usually provided with gas outlets.

There should be two entrances to the lodge room, both to be placed at the rear end of the room on either side of the senior warden's station: the one on the right of the main entrance is for the initiated members of the fraternity, and the one on the left for the entrance of candidates. On either side of the candidates' doorway on the lodge room side are usually placed two symbolic columns surmounted by spheres, and these columns to be symbolically correct must be Egyptian and in accordance with the biblical description of the columns outside the doorway to King Solomon's Temple. These columns are familiar to most readers, as they are frequently located on the exterior at each side of the main entrance.

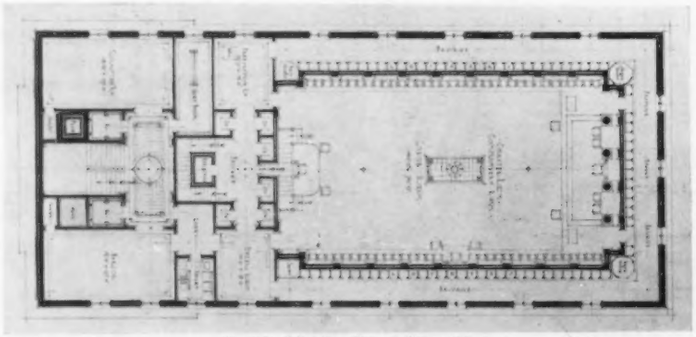
Interior of Lodge Room in Masonic Building, New York, N. Y.
H. P. Knowles, Architect

Where a gallery is placed in the lodge room, access to it should be from the lodge room only or from a vestibule at the entrance to the lodge room arranged in such manner that it can be entered only by those who have passed the inspection of the tiler at his station immediately outside of the lodge room entrance door. The organ loft or any portion of the mezzanine space which looks into the lodge room must be similarly arranged and should have no entrance on the mezzanine floor.

The chapter room may be of dimensions similar to the standard lodge room. The candidates' preparation room, however, should be larger than that of the lodge room, as more candidates may be initiated at one time in this branch of the order.

In the chapter room there should also be constructed, either in or adjacent to the candidates' room, a well about four and one-half feet square and from twelve to fifteen feet deep, which is entered from the top by means of a trap door placed flush with the floor of the candidates' room, or in a smaller room adjoining. This well should be furnished with paraphernalia peculiar to the chapter degrees and is usually installed by members of the chapter.

The altar in the center of the chapter room is triangular in shape instead of rectangular, as in



An Ideal Lodge Room Floor Plan

Interiors of Lodge Rooms in Masonic Temple, Salem, Mass.
L. S. Couch, Architect; Little & Browne, Associate Architects

the case of the lodge room. A number of electric outlets should be provided in the floor, the base, and ceiling, in addition to those required in the lodge room.

The public halls and corridors in the lodge room floors should be laid out with liberal dimensions, as they are used for a common meeting ground by the members of different bodies meeting at the same time. Many members visit the temple for social intercourse and may spend little time in the lodge room, but devote most of it to smoking or chatting in the anterooms or the adjacent corridors. These halls and corridors, therefore, should be as spacious as possible and arranged for lounging purposes.

The lodge anterooms are grouped around the entrance end of the lodge room and this portion is usually two stories high, affording a mezzanine over these anterooms.

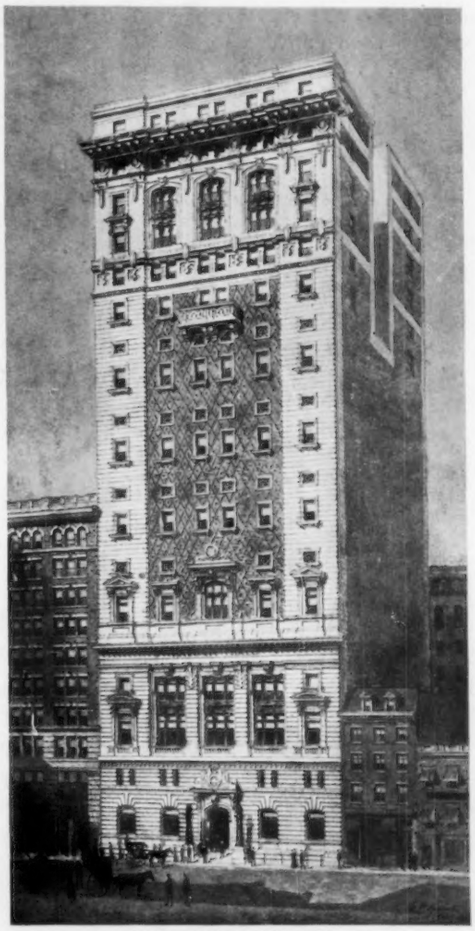
The candidates' preparation room is usually furnished with lockers for the use of the candidates.

The tiler's room, which is in reality the entry to the lodge room, need not necessarily be large; about twelve by sixteen feet is ample for the average tiler's room. It is usually furnished with lockers and drawers —about one or two large drawers and one or two lockers or small cupboards for each lodge, chapter, or other Masonic body occupying the room. These are under the direct charge of the tiler and in them are kept hymnals, gloves, aprons, and smaller pieces of paraphernalia, such as gavels, symbolic working tools, etc.

Beyond the tiler's room and well separated from the lodge room should be placed a parlor for the use of members during intermissions.

There should also be a committee room, although this is not infrequently placed on the mezzanine floor over the lodge anterooms.

If it can be arranged, it is well to provide each meeting room with its own separate toilet room. The average lodge room requires a toilet room with about two toilets, two urinals, and a wash basin, and located near this toilet room should be a liberal sized hat and coat room.



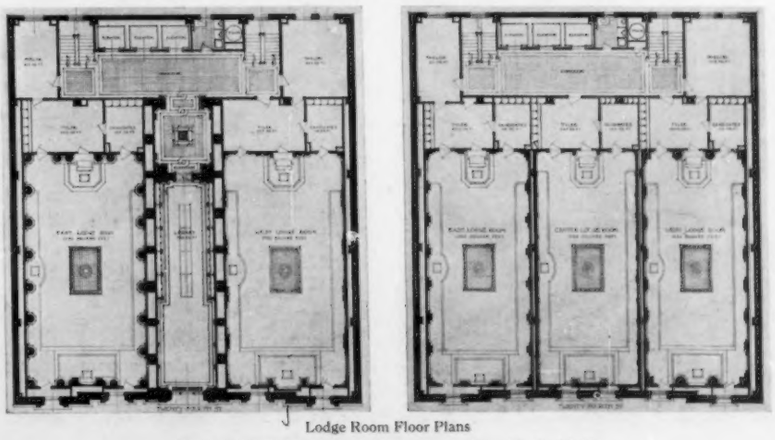
General View of Exterior

On the mezzanine over the anterooms are placed committee rooms, storage and paraphernalia rooms, and an examination room. The paraphernalia room is usually fitted with various sized closets with shelving and spaces for banners, staffs, flags, costumes, etc., and each of the organizations meeting in the lodge room below is entitled to one or more of these closets for the storage of its paraphernalia, so that the number of closets is governed by the number of organizations they are intended to serve.

The examining room is used for the examination of visitors and is usually the size of a small committee room.

An essential feature of a modern Masonic Temple is the banquet room, which is usually located in the basement with the kitchen. It should be capable of seating two or three hundred persons, and in order to accommodate organizations of various sizes the room should be so arranged that it can easily be subdivided.

A very important consideration in the construction of these buildings is that the main meeting rooms, the lodge room, chapter room, commandery room, assembly room, etc., should be as nearly sound proof as possible. Various methods familiar to all architects may be used, but it has been found that in fireproof structures the doubling of the partitions, leaving a small air space between and furring the ceilings down, have been suffi-



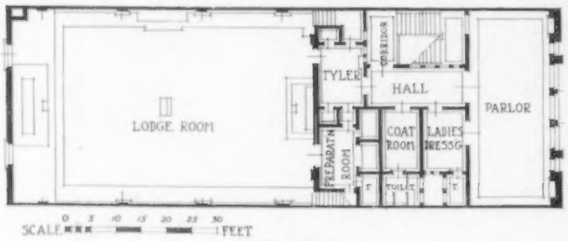
Lodge Room Floor Plans

Masonic Building, West 24th Street, New York, N. Y.
H. P. Knowles, Architect

ciently effective ; but conditions, of course, must govern the proper solution of this problem.

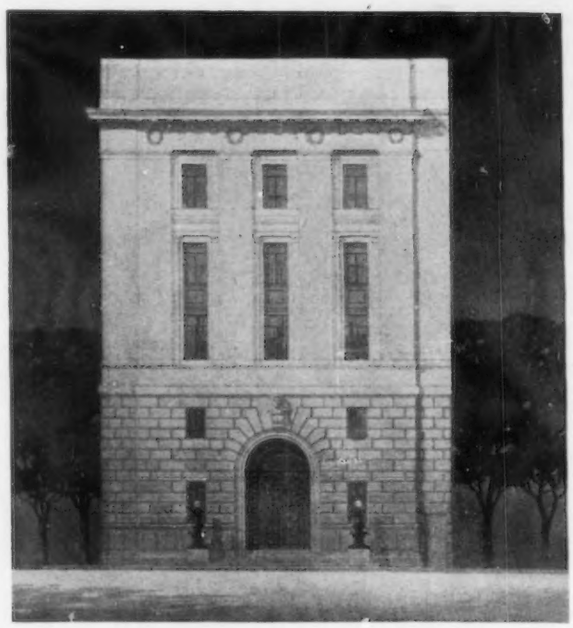
Every Masonic Temple should be furnished with a vault or safe room. When the building is to be used as the headquarters of the State Grand Lodge, a vault must be furnished for the storage of the Grand Lodge paraphernalia and jewels, while each lodge should be furnished with a small fireproof compartment for the storage of its records, jewels, and valuable papers. In large temples a safe room is usually constructed in which are installed steel compartments similar to a safe deposit vault.

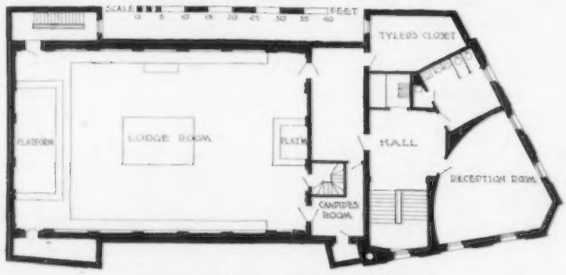
In communities where there are two or more Masonic organizations, a Masonic Club is also found to exist, and the local temple usually provides quarters for this club. These quarters are fitted up with all the usual club facilities for amusement, together with a library and reading room and accommodations for a caterer. These rooms



Second Floor Plan

Masonic Temple, Des Moines, Ia.
Frank E. Wetherell, Architect





Elevation and Typical Lodge Room Floor Plan

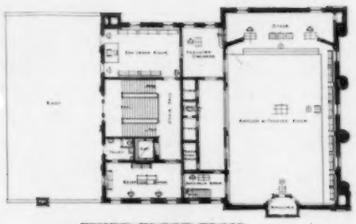
Masonic Temple, Yonkers, N. Y.
Vollmer & Beersman, Architects; Evarts Tracy, Associated

are generally placed on the top story or in the basement.

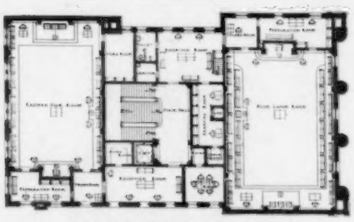
The Masonic Temple in Brooklyn, designed by Messrs. Lord & Hewlett and Pell & Corbett, Associated Architects, is undoubtedly one of the most successful in the country both from an architectural as well as the Masonic utilitarian viewpoint. This building has been published so frequently that we will not again reproduce it; but the typical lodge plan is here repeated and needs only a glance to see its beauty. Simple in arrangement with proportions carefully studied, it is without question one of the very best illustrations of the ideal Masonic Temple lodge plan.

The Masonic Temple in New York is of the skyscraper type, and unfortunately, owing to conditions which confronted the fraternity at the time of its erection, space was necessarily limited, with the result that the building is somewhat crowded.

There are probably more lodge rooms in this building than in any other structure of its kind in the world. It has twelve lodge rooms accommodating one hundred and forty-four organizations; a grand lodge room seating twelve hundred and used for Grand Lodge annual conventions, assemblies, and large Masonic functions; Masonic Club quarters on the top of the building and

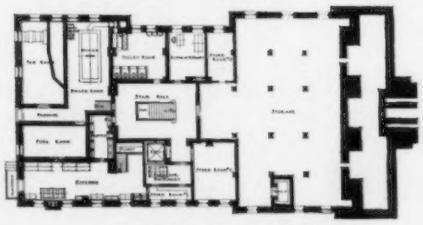


THIRD FLOOR PLAN

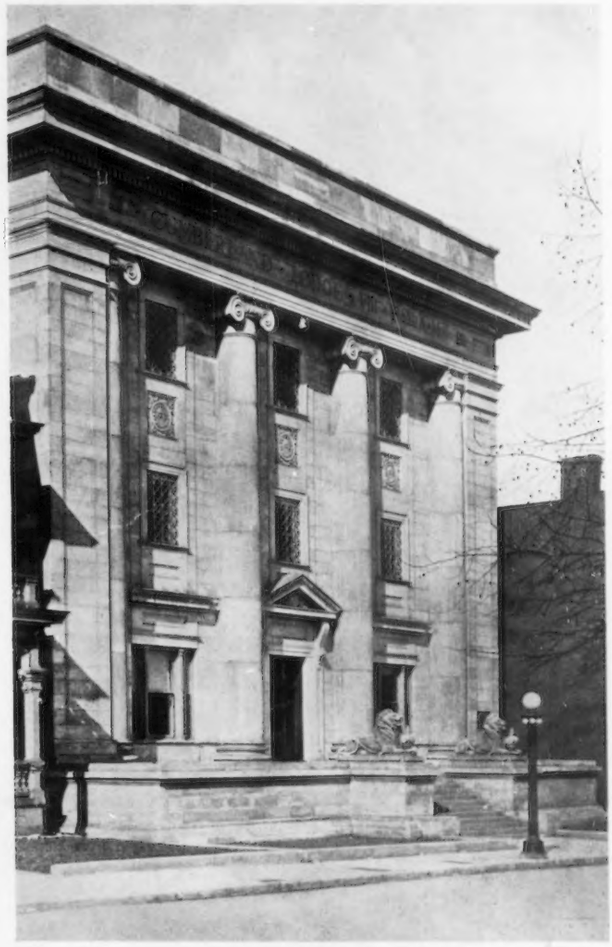


SECOND FLOOR PLAN

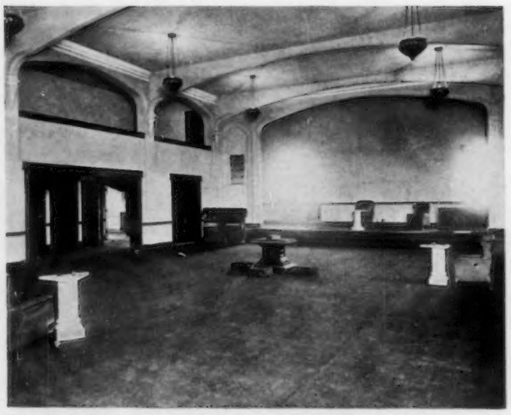
FIRST FLOOR PLAN



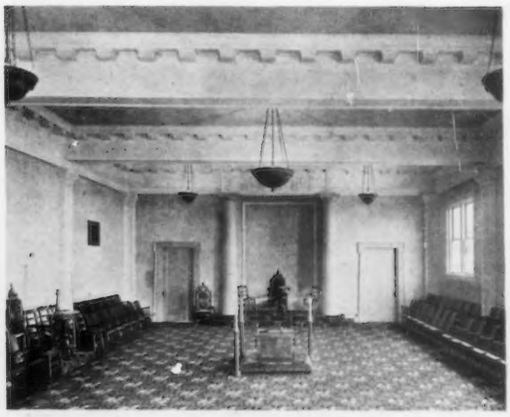
BASEMENT FLOOR PLAN



GENERAL VIEW OF EXTERIOR



CHAPTER ROOM



EASTERN STAR ROOM

CUMBERLAND LODGE, MASONIC TEMPLE, NASHVILLE, TENN.

ASMUS & NORTON, ARCHITECTS

executive offices for the Grand Lodge of New York State on one of the upper floors. The membership of the various bodies occupying this building probably totals over 50,000, and, excepting during two months in the summer, the building is fully occupied every night.

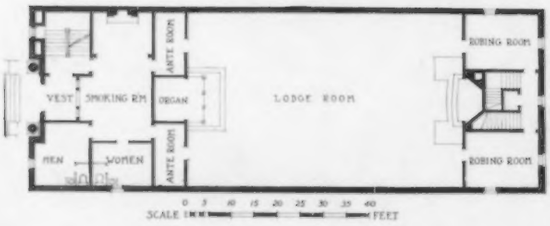
Masonic Temple, Indianapolis, Ind.
Rubush & Hunter, Architects

Another temple more recent than the New York and Brooklyn buildings, which typifies the ideal Masonic Temple, is the one just finished in San Francisco, designed by Messrs. Bliss & Faville. The Temple in Washington, designed by Messrs. Wood, Donn & Deming, is another dignified example of this type of building.

Many others equally interesting might be mentioned, but it must also be admitted that very many others might also be illustrated to show the lack of study and consideration which in so many cases has been given to this interesting type of building.

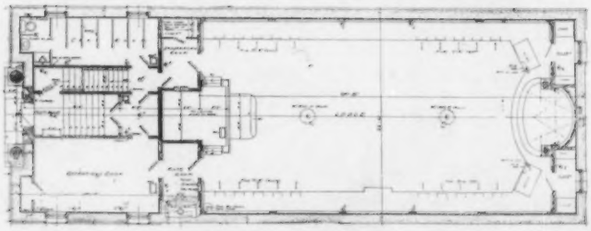
NOTE. — The author mentions several Masonic Temples which, because of their previous publication, have not been included among the illustrations in this paper. For the convenience of those who wish to study these buildings, references to the periodicals in which they and other secret order buildings of merit have been published are given herewith. The following, not otherwise marked, appeared in THE BRICKBVILDER in the months named:

Masonic Temple, Brooklyn, N. Y., Lord & Hewlett and Pell & Corbett, Associated Architects, July, 1909; Masonic Temple, Washington, D. C., Wood, Donn & Deming, Architects, July, 1909; Masonic Temple, Camden, N. J., Heacock & Hokanson, Architects, September, 1913; Masonic Temple, Memphis, Tenn., Jones & Furbringer, Architects, September, 1914; Elks Club House, Philadelphia, Pa., Simon & Bassett, Architects, July, 1906; Elks Club House, Brooklyn, N. Y., H. Van Buren Magonigle and A. W. Ross, Architects, March, 1915; Temple of the Scottish Rite, Washington, D. C., John Russell Pope, Architect, *The Architectural Review*, January, 1916; Masonic Temple, San Francisco, Cal., Bliss & Faville, Architects, *Architecture*, March, 1914. — EDITORS.



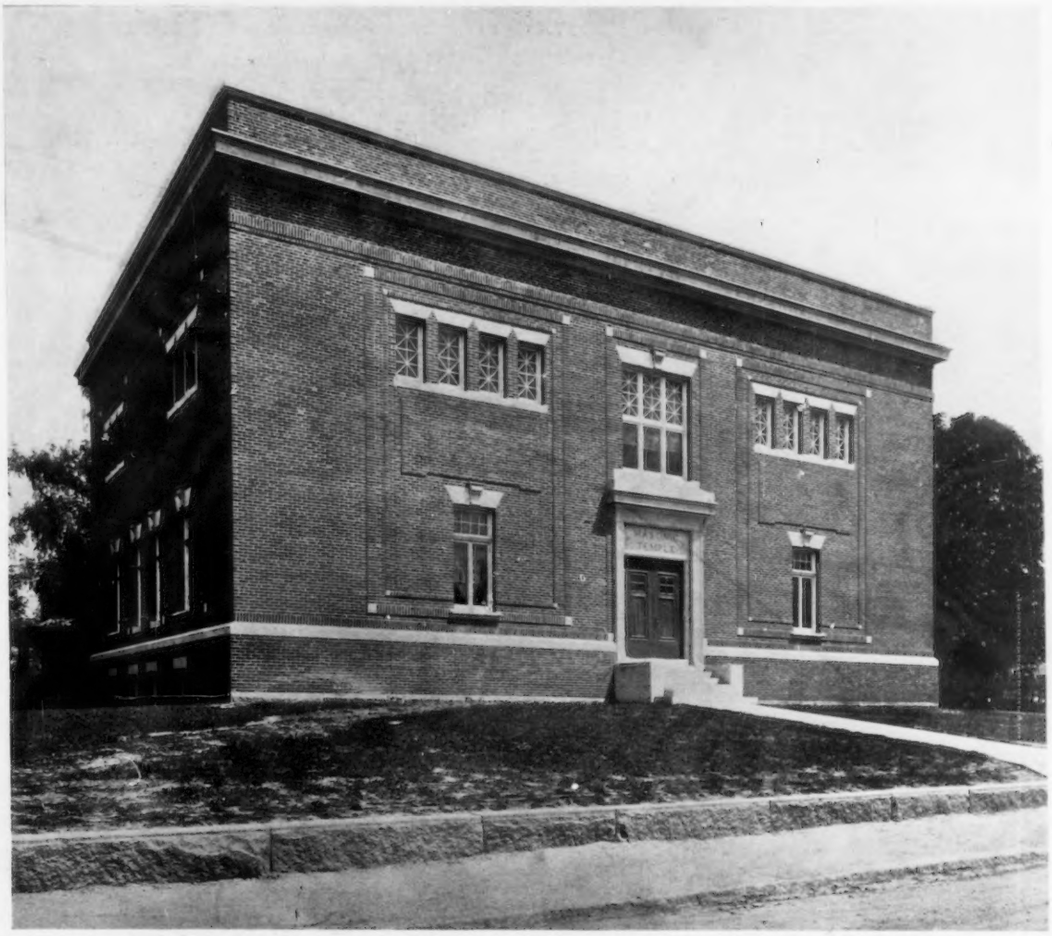
First Floor Plan

I. O. O. F. Temple, Hamburg, N. Y.
Lansing, Bley & Lyman, Architects

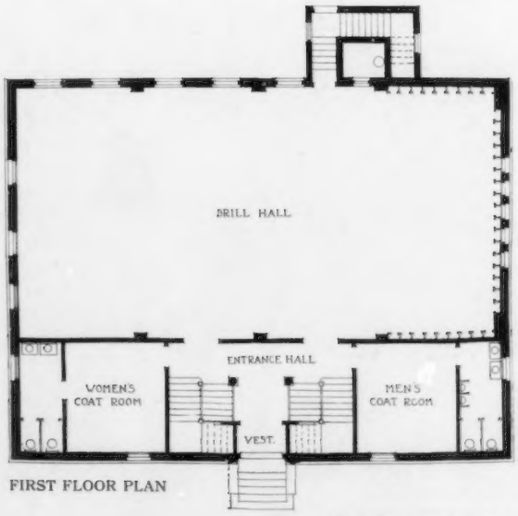


First Floor Plan

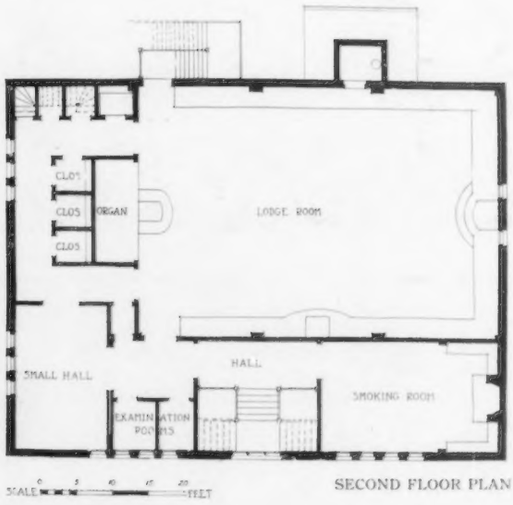
Masonic Temple, Buffalo, N. Y.
Green & Wicks, Architects



GENERAL VIEW OF EXTERIOR



FIRST FLOOR PLAN



SECOND FLOOR PLAN

MASONIC TEMPLE, EAST WEYMOUTH, MASS.

ARTHUR H. VINAL AND J. SUMNER FOWLER, ARCHITECTS

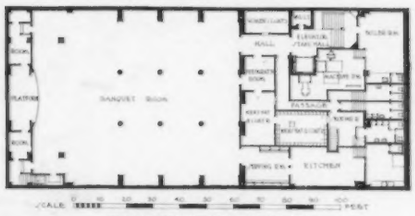
Group of Lodge Buildings of Representative Fraternal Societies and Secret Orders

GENERAL VIEW OF EXTERIOR

THIRD FLOOR PLAN

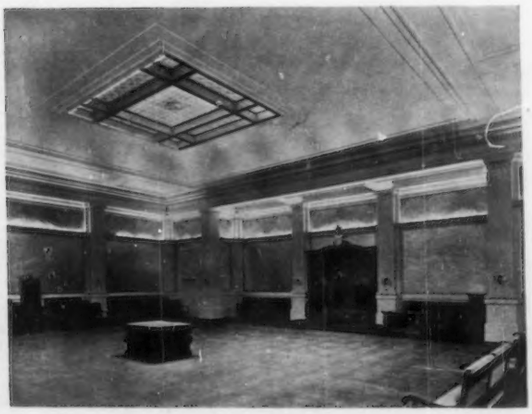
SECOND FLOOR PLAN

FIRST FLOOR PLAN



BASEMENT FLOOR PLAN

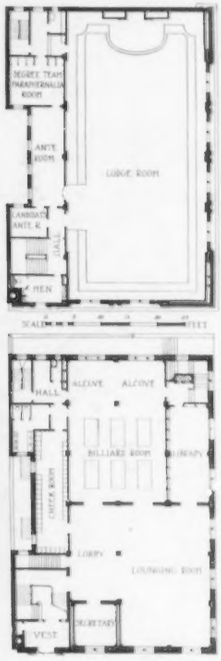
AUDITORIUM



LODGE ROOM

KNIGHTS OF COLUMBUS BUILDING, SAN FRANCISCO, CAL.
SMITH O'BRIEN, ARCHITECT

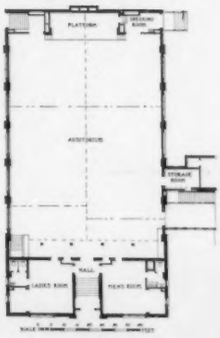
GENERAL VIEW OF EXTERIOR



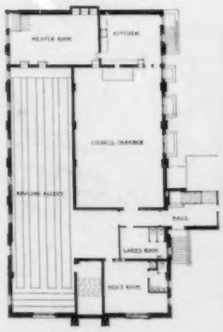
FLOOR PLANS

EAGLES CLUB HOUSE, BUFFALO, N. Y.

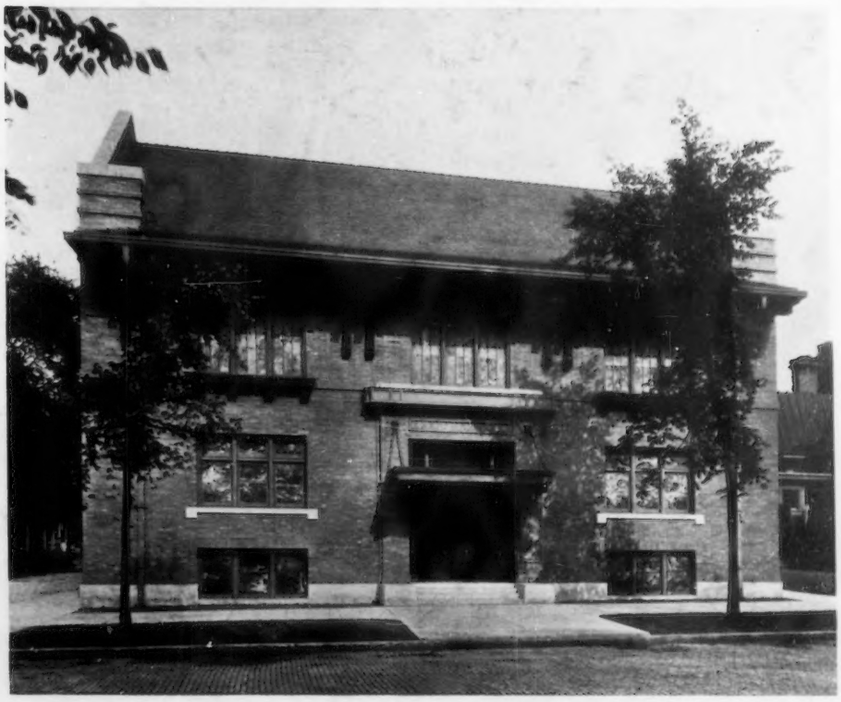
ESENWEIN & JOHNSON, ARCHITECTS



FIRST FLOOR PLAN



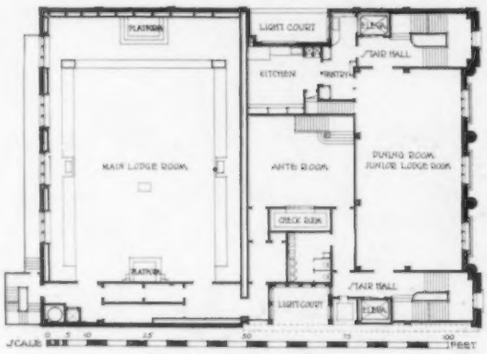
BASEMENT PLAN



GENERAL VIEW OF EXTERIOR

KNIGHTS OF COLUMBUS BUILDING, COLUMBUS, OHIO

FRANK GLEICHAUF, ARCHITECT



FOURTH FLOOR PLAN

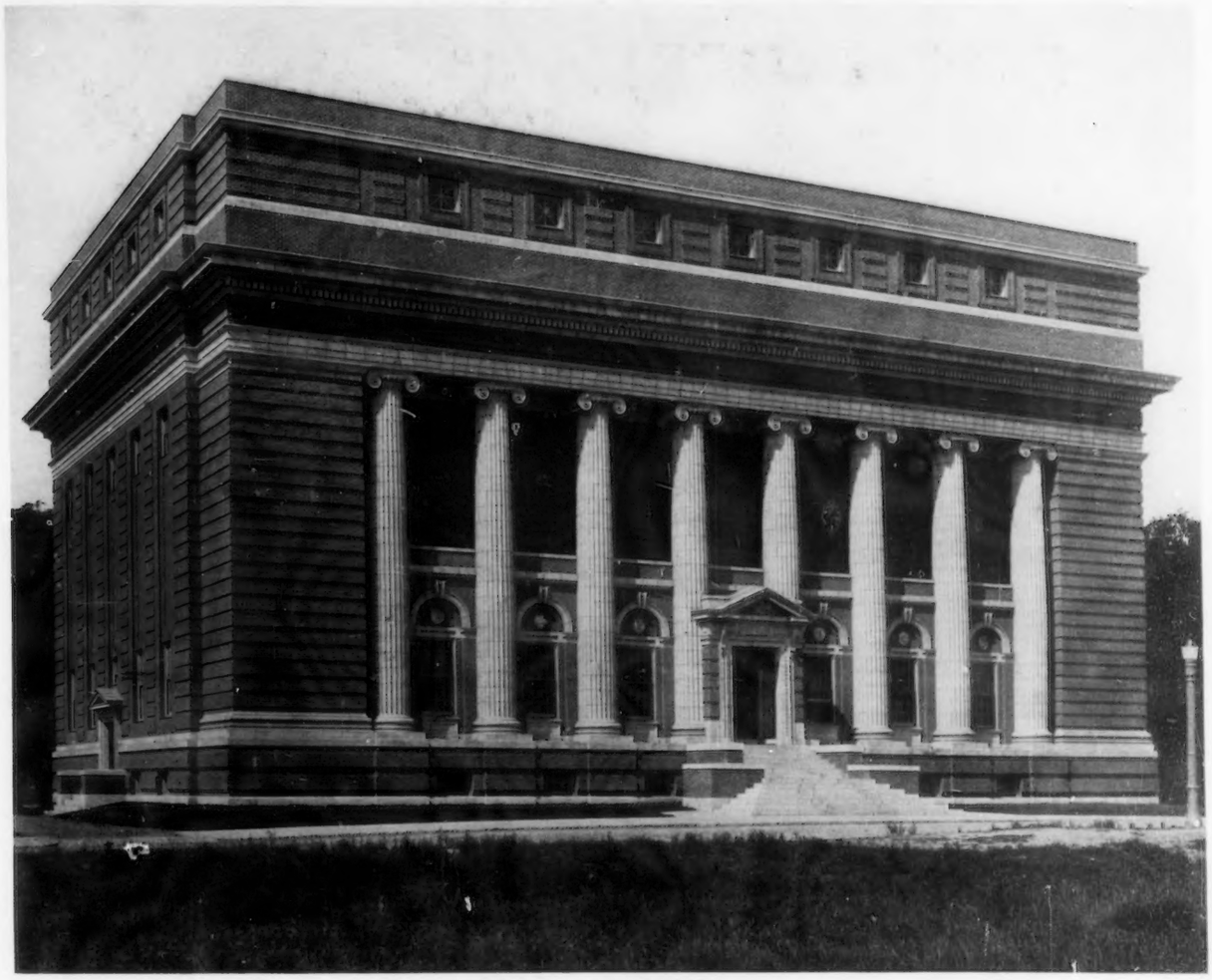
SECOND FLOOR PLAN

TEMPLE OF THE LOYAL ORDER OF MOOSE
PITTSBURGH, PA.
U. J. L. PEOPLES, ARCHITECT

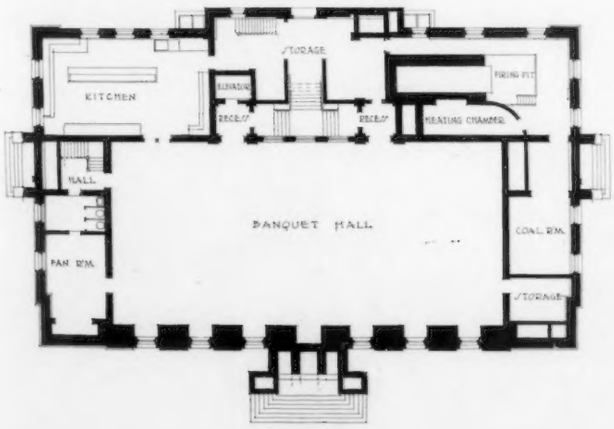
THIRD FLOOR PLAN

FIRST FLOOR PLAN

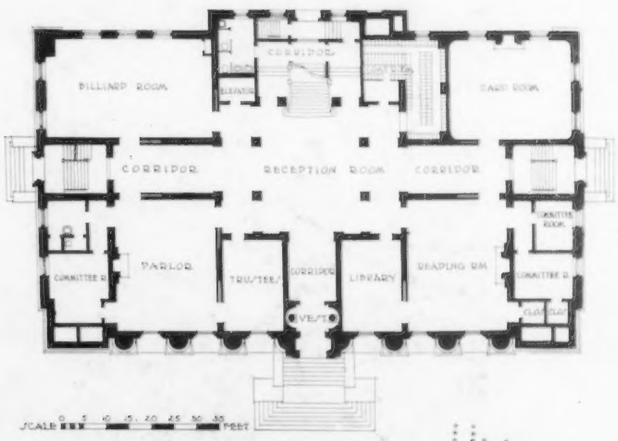
YOUNG MEN'S INSTITUTE AND DONAHUE LIBRARY, SAN FRANCISCO, CAL.
W. D. SHEA, ARCHITECT



GENERAL VIEW OF EXTERIOR



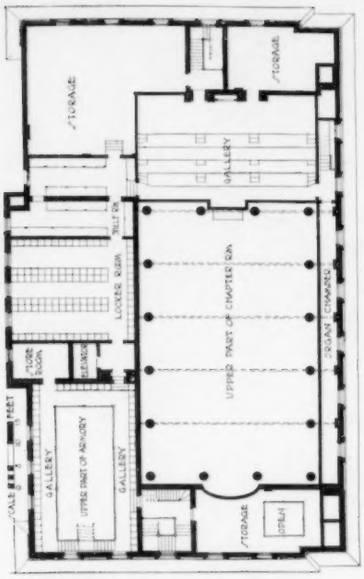
BASEMENT FLOOR PLAN



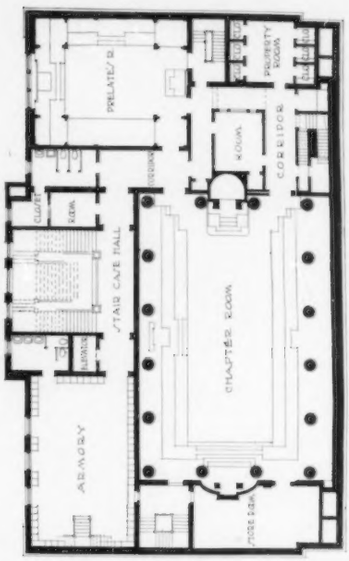
FIRST FLOOR PLAN

MASONIC TEMPLE, WORCESTER, MASS.

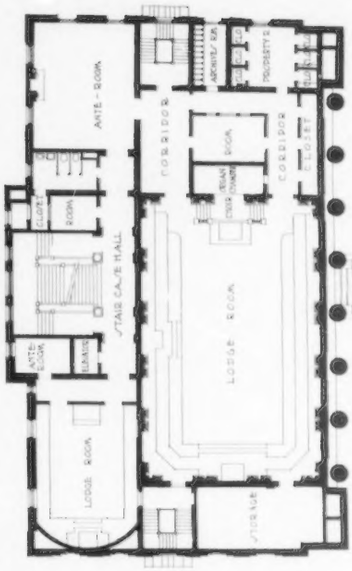
GEORGE C. HALCOTT, ARCHITECT



THIRD FLOOR MEZZANINE PLAN



THIRD FLOOR PLAN



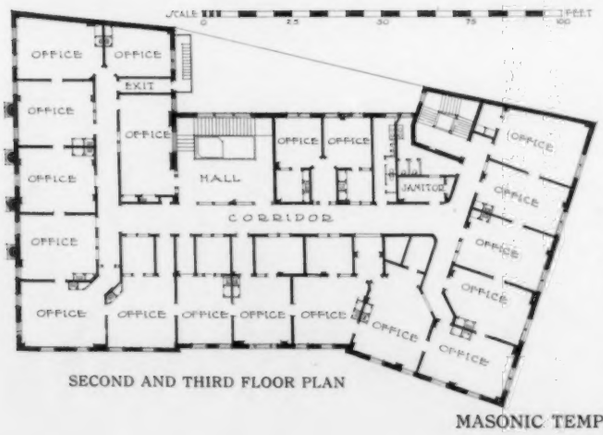
SECOND FLOOR PLAN

DETAIL OF MAIN FACADE

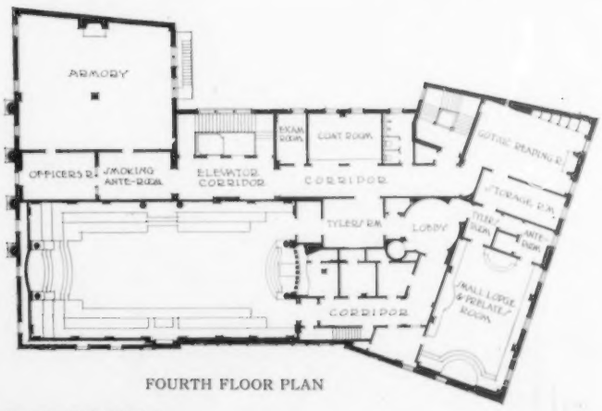
MASONIC TEMPLE, WORCESTER, MASS.

GEORGE C. HALCOTT, ARCHITECT

GENERAL VIEW OF EXTERIOR



SECOND AND THIRD FLOOR PLAN

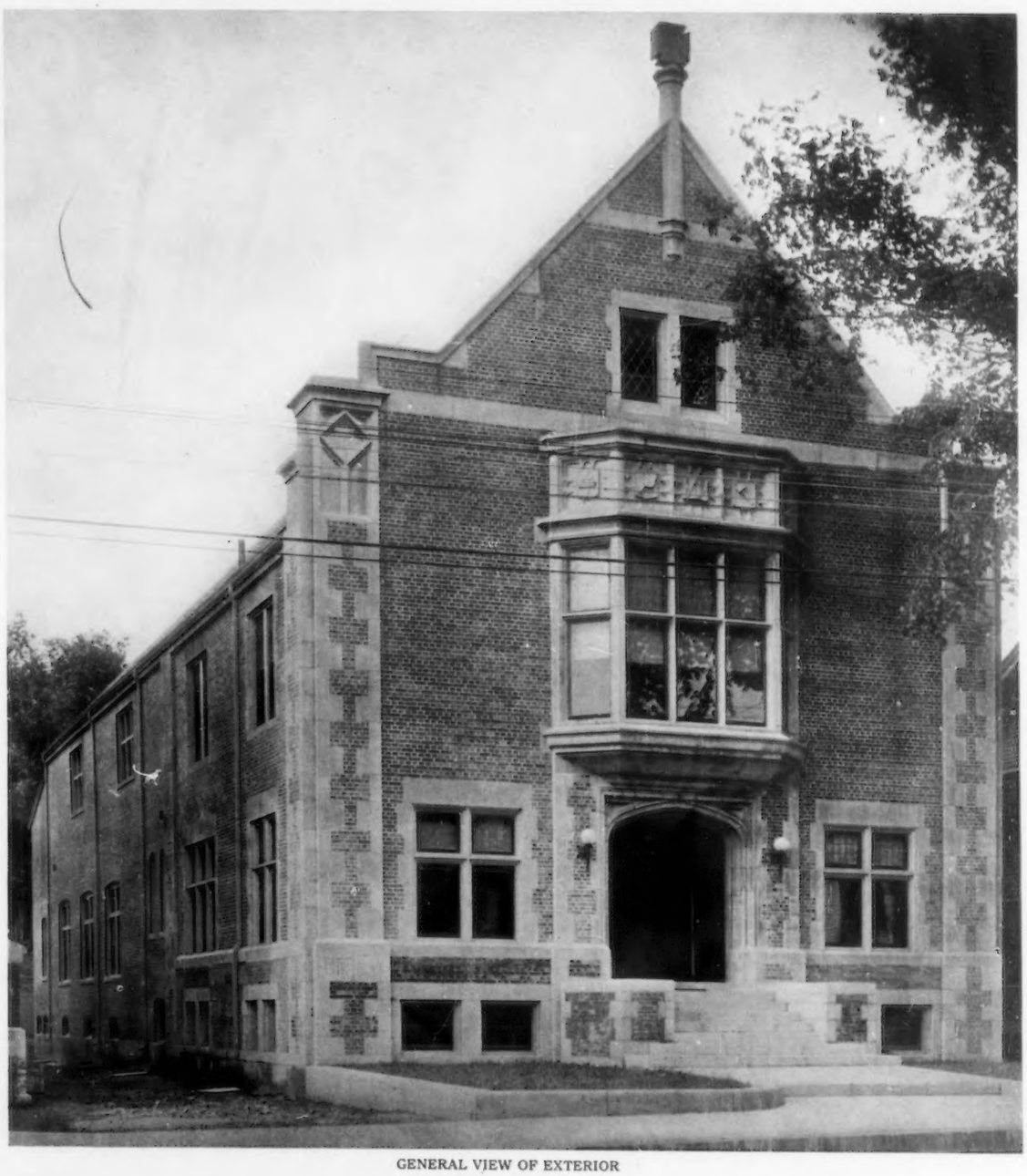


FOURTH FLOOR PLAN

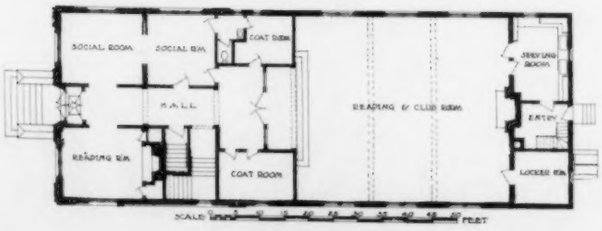
MASONIC TEMPLE, SALEM, MASS.

L. S. COUCH, ARCHITECT

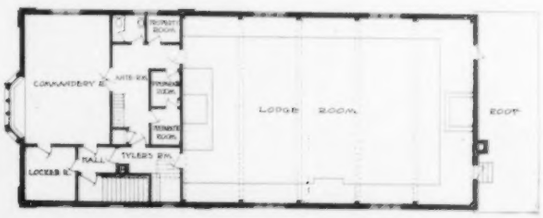
LITTLE & BROWNE, ASSOCIATE ARCHITECTS



GENERAL VIEW OF EXTERIOR



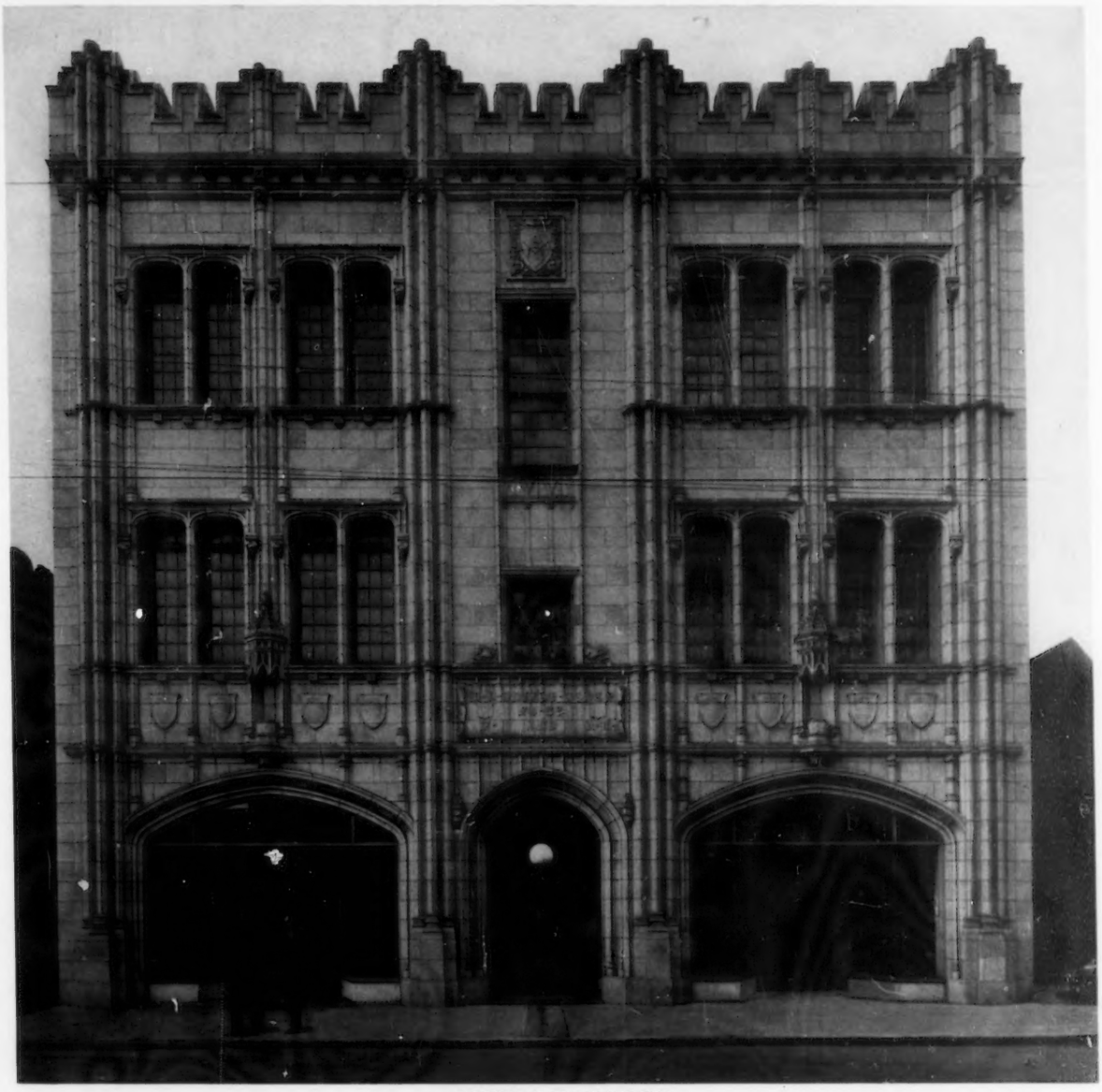
FIRST FLOOR PLAN



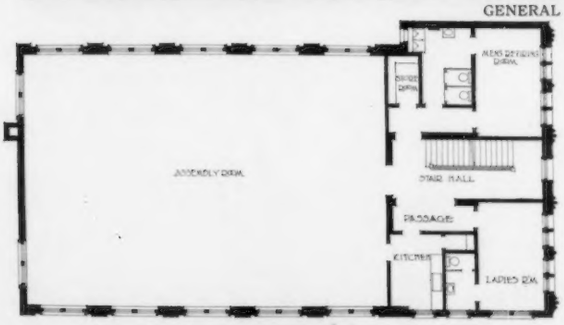
SECOND FLOOR PLAN

MASONIC TEMPLE, BENNINGTON, VT.

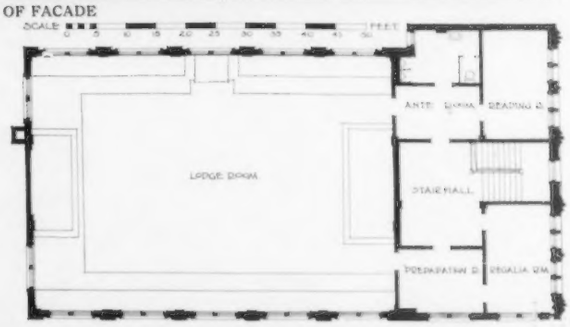
HARDING & SEAVER, ARCHITECTS



GENERAL VIEW OF FACADE



SECOND FLOOR PLAN

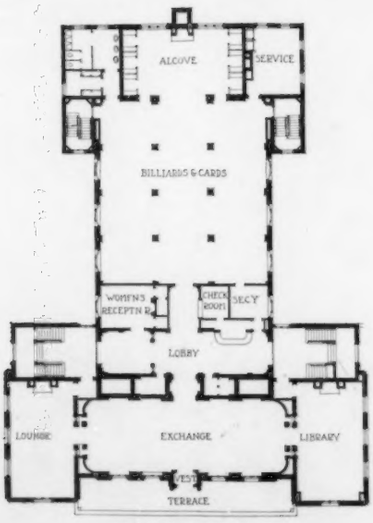


THIRD FLOOR PLAN

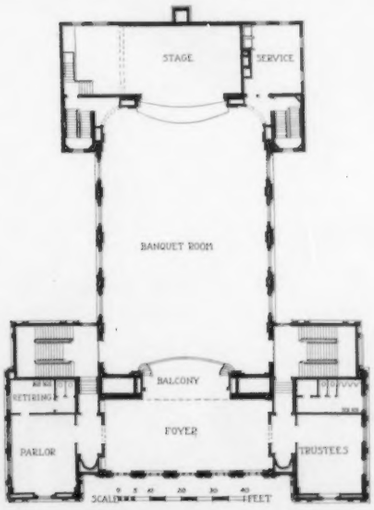
W. D. LUCKIE LODGE MASONIC BUILDING, ATLANTA, GA.

HENTZ, REID & ADLER, ARCHITECTS

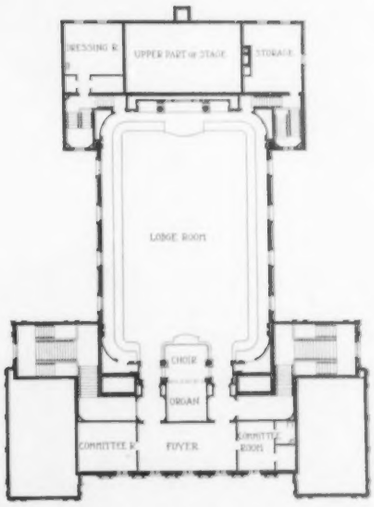
GENERAL VIEW OF EXTERIOR



FIRST FLOOR PLAN



SECOND FLOOR PLAN

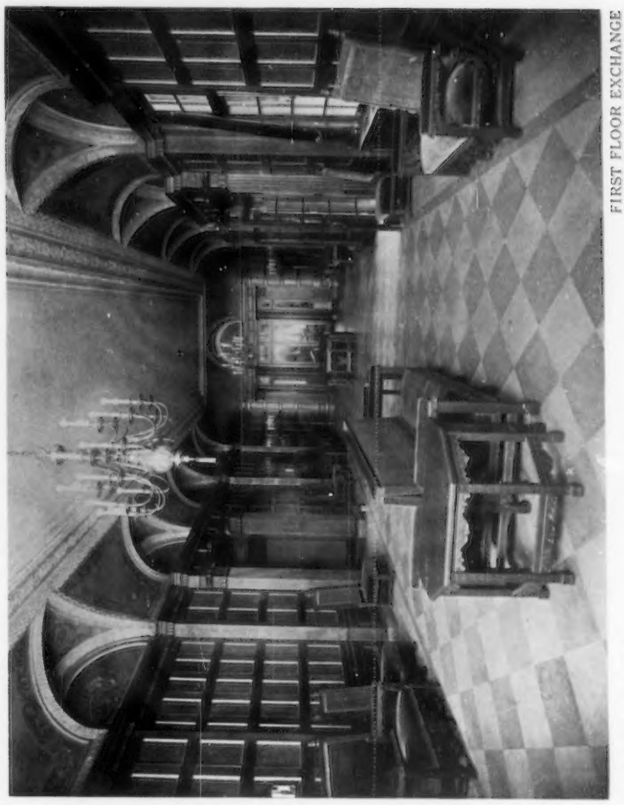


THIRD FLOOR PLAN

ELKS CLUB HOUSE, COLUMBUS, OHIO

FRANK L. PACKARD, RALPH SNYDER, GEORGE R. BASSETT, AND EDWARD F. BABBITT,
ARCHITECTS AND ENGINEERS, ASSOCIATED

RECEPTION FOYER



FIRST FLOOR EXCHANGE

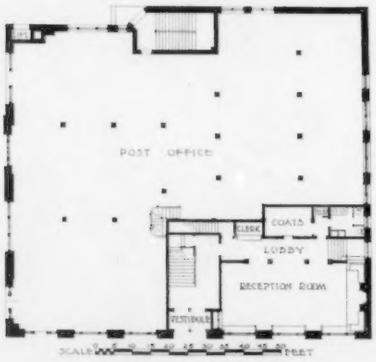
ELKS CLUB HOUSE, COLUMBUS, OHIO

FRANK L. PACKARD, RALPH SNYDER, GEORGE R. BASSETT, AND EDWARD F. BABBITT
ARCHITECTS AND ENGINEERS, ASSOCIATED

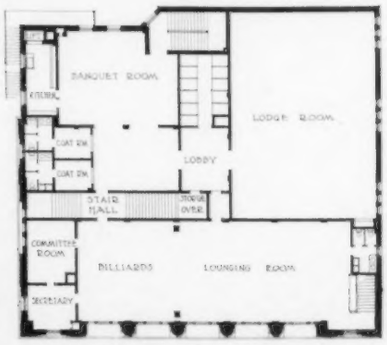
RATHSKELLAR

NORTH END OF LODGE ROOM

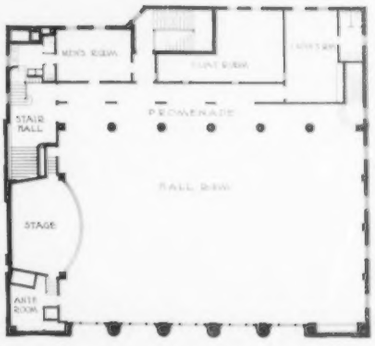
GENERAL VIEW OF EXTERIOR



FIRST FLOOR PLAN



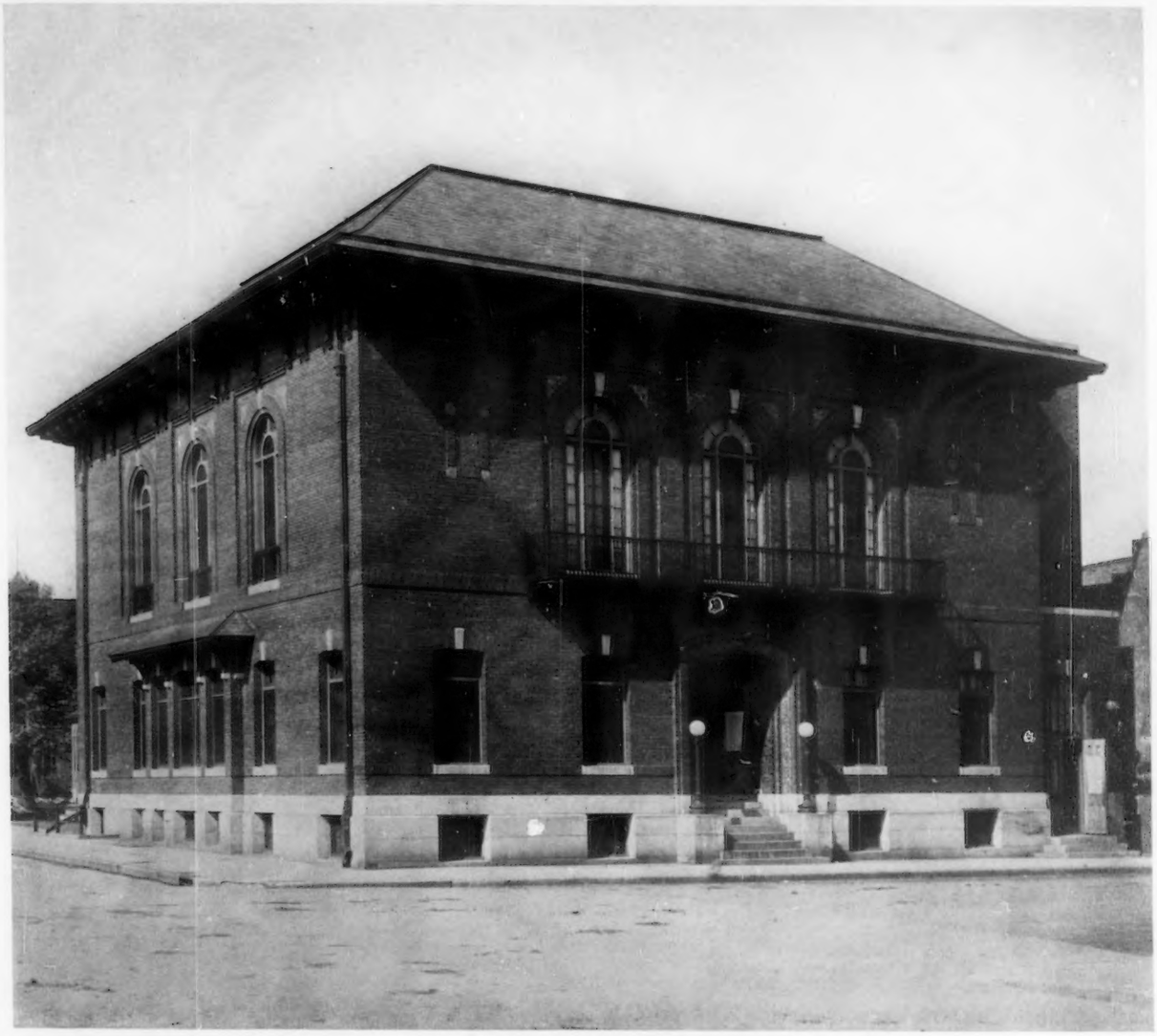
SECOND FLOOR PLAN



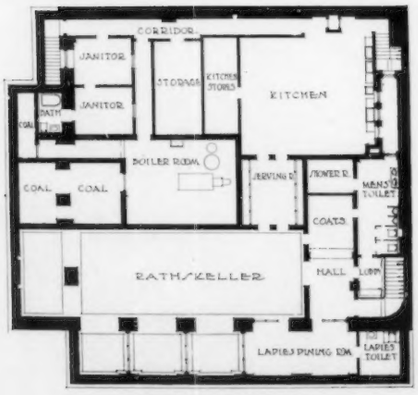
THIRD FLOOR PLAN

ELKS CLUB HOUSE, CAMBRIDGE, MASS.

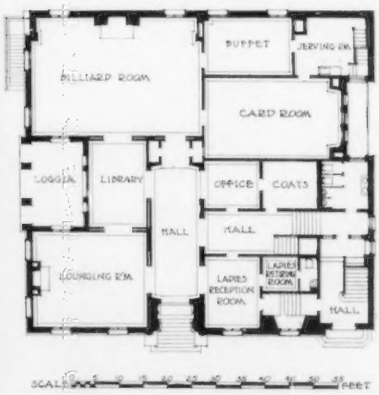
CHARLES R. GRECO, ARCHITECT



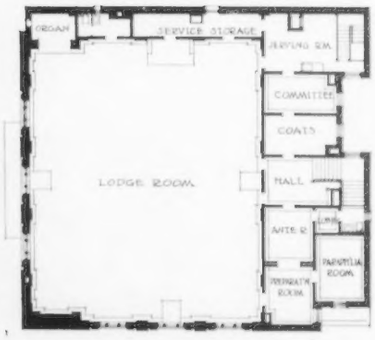
GENERAL VIEW OF EXTERIOR



BASEMENT FLOOR PLAN



FIRST FLOOR PLAN



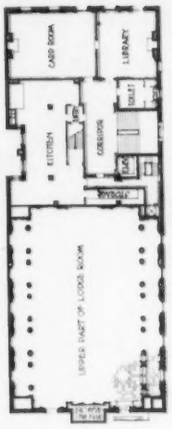
SECOND FLOOR PLAN

ELKS CLUB HOUSE, MANKATO, MINN.

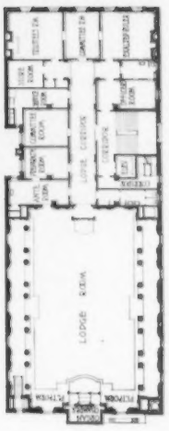
TYRIE & CHAPMAN, ARCHITECTS

DETAIL OF UPPER STORIES

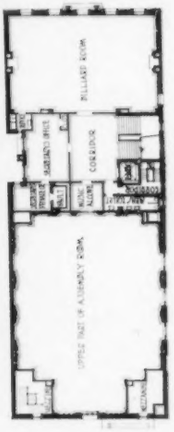
FIFTH FLOOR PLAN



FOURTH FLOOR PLAN



THIRD FLOOR PLAN



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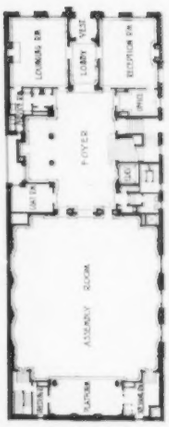
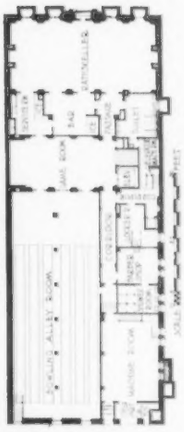


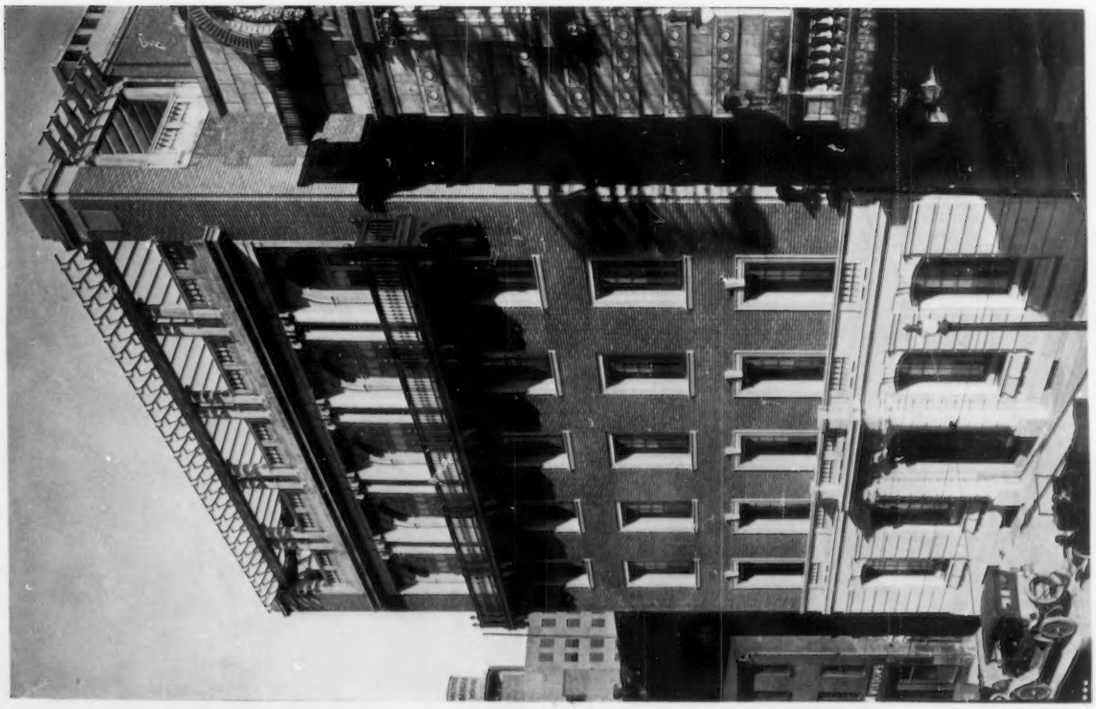
FIRST FLOOR PLAN



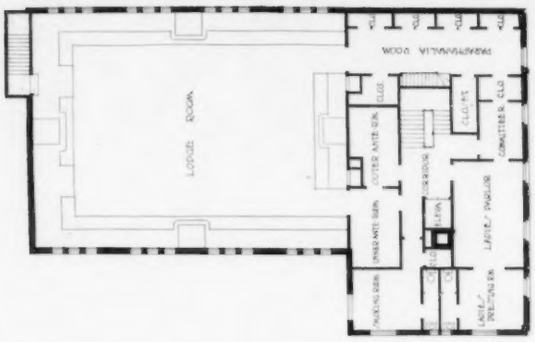
BASEMENT FLOOR PLAN

ELKS CLUB HOUSE, BALTIMORE, MD.

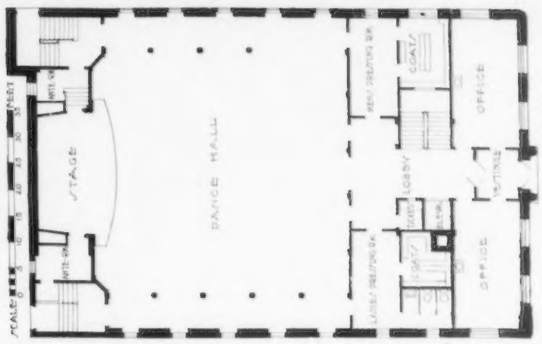
WYATT & NOLTING, ARCHITECTS



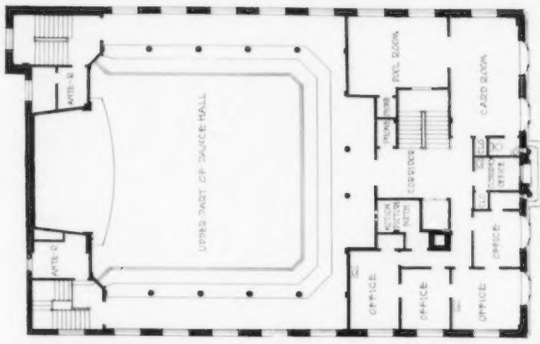
GENERAL VIEW OF EXTERIOR



FOURTH FLOOR PLAN



FIRST FLOOR PLAN



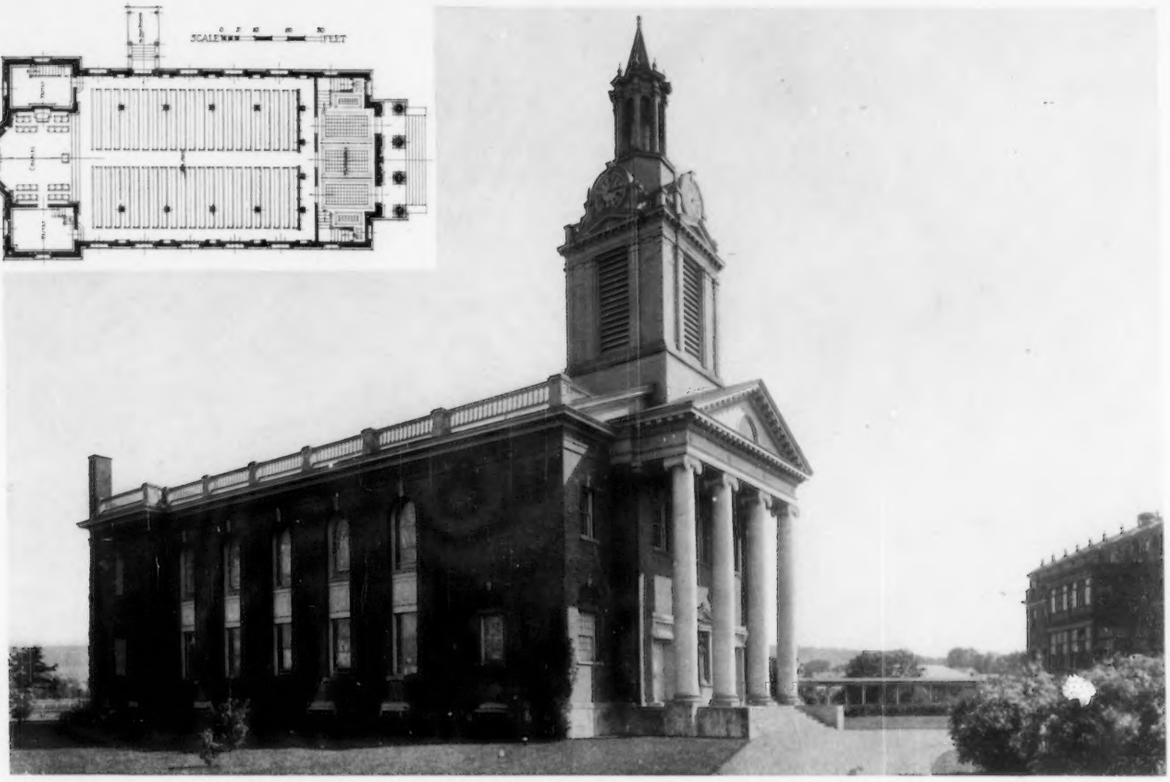
SECOND FLOOR PLAN

BASEMENT FLOOR PLAN

GENERAL VIEW OF EXTERIOR

PYTHIAN TEMPLE, BROCKTON, MASS.

JAMES H. RITCHIE, ARCHITECT

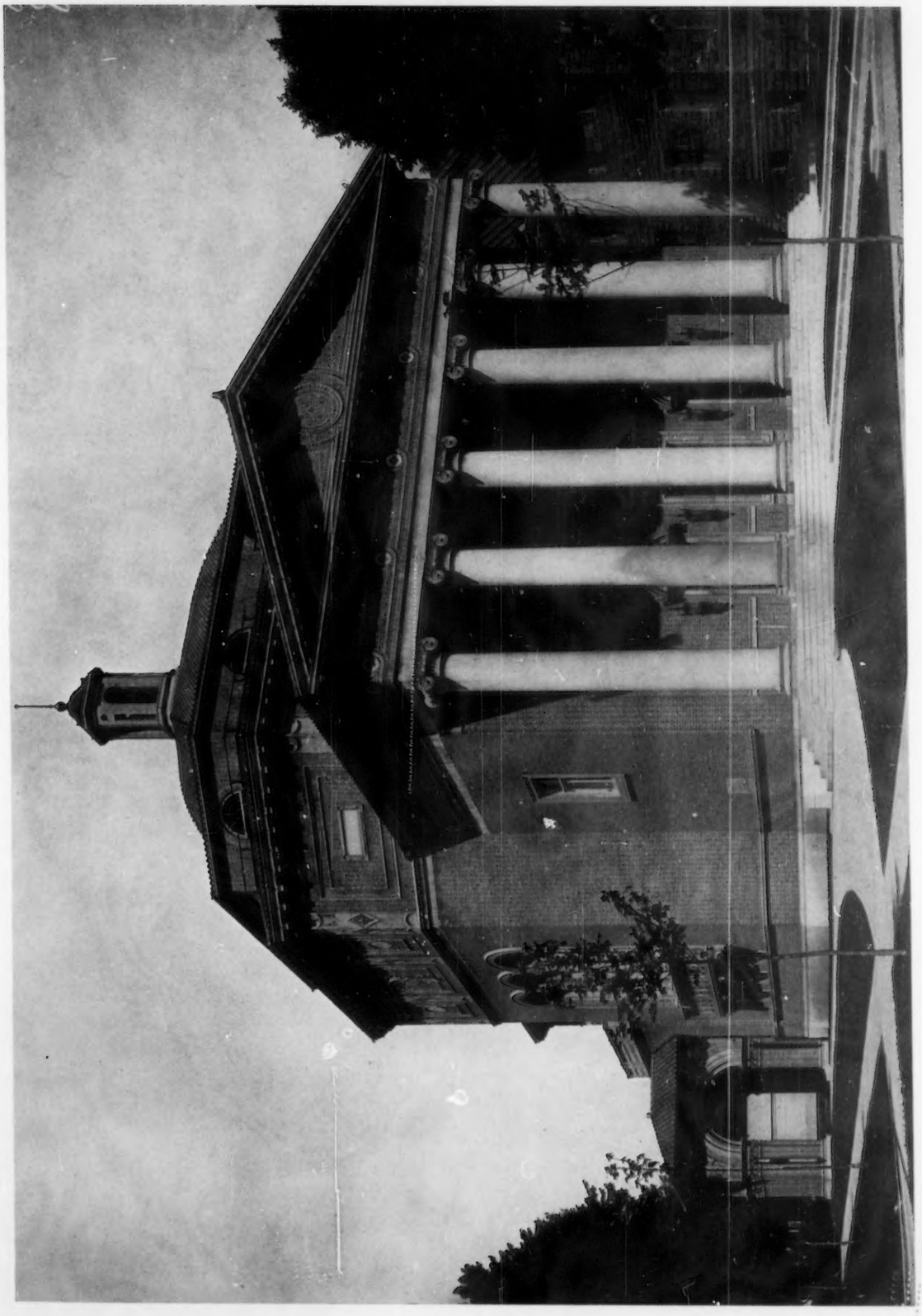


GENERAL VIEW OF EXTERIOR

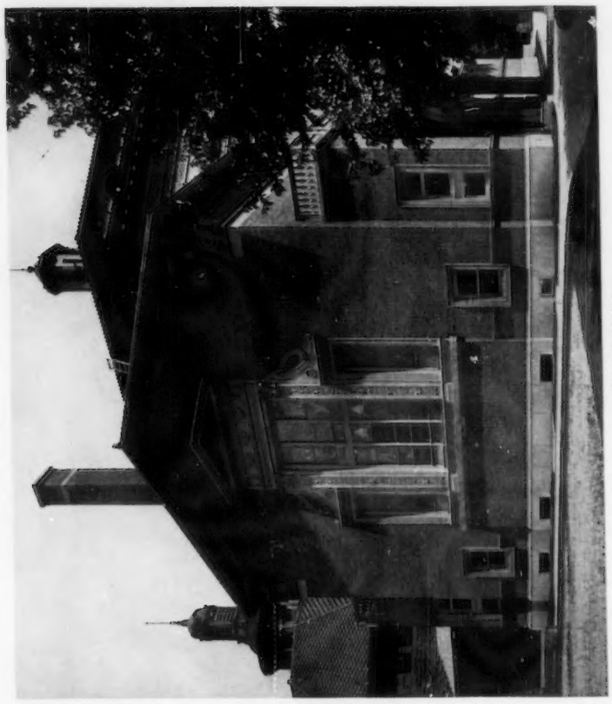
INTERIOR LOOKING TOWARD CHANCEL

CHAPEL OF MASONIC HOME, UTICA, N. Y.

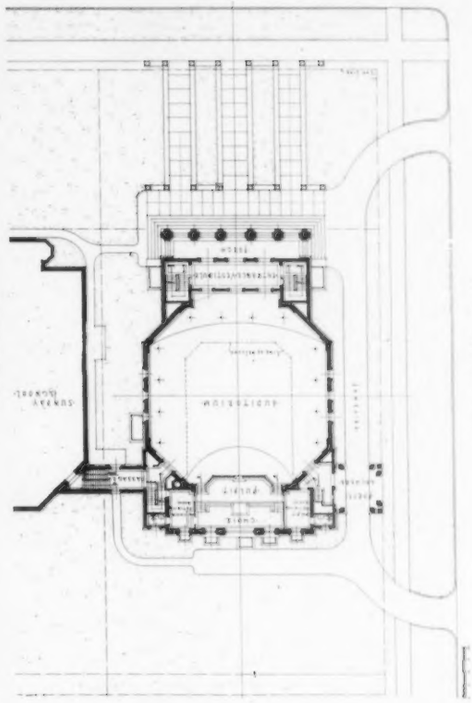
H. P. KNOWLES, ARCHITECT



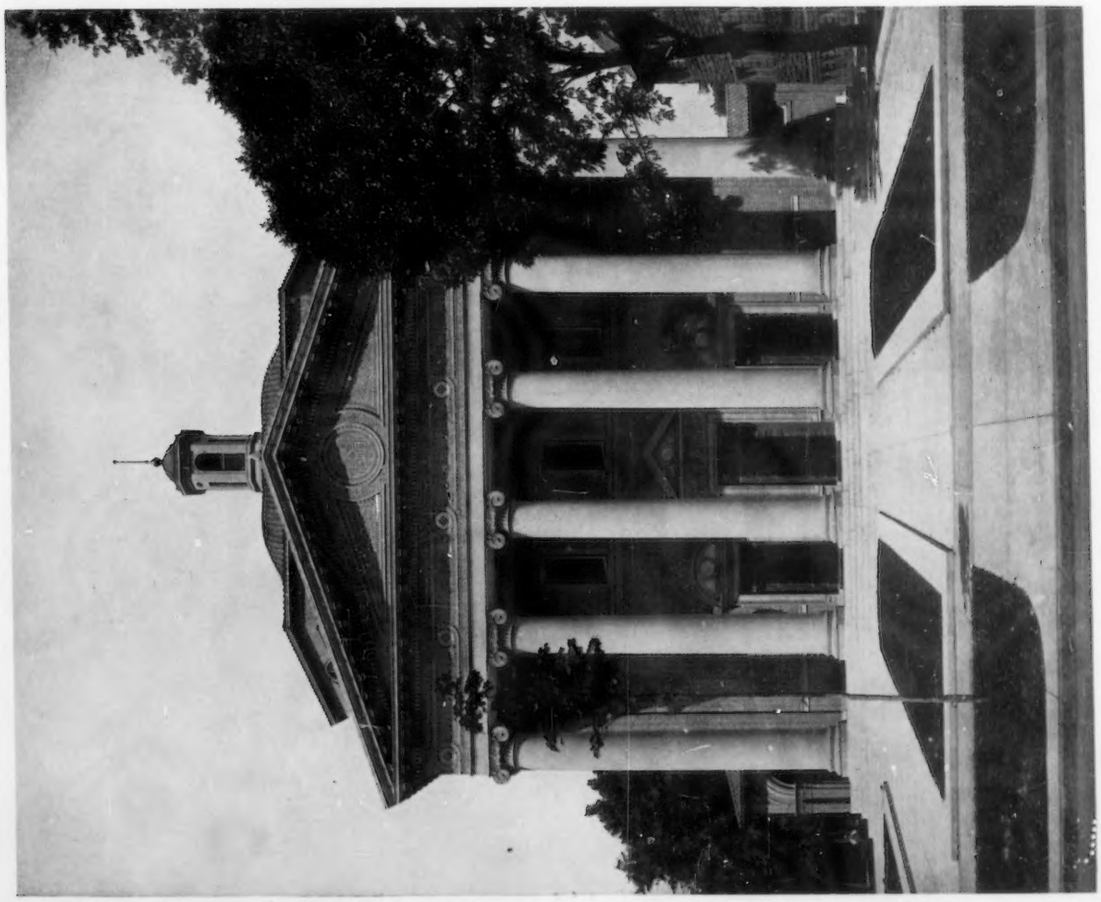
FIRST CONGREGATIONAL CHURCH, TOLEDO, OHIO
MILLS, RHINES, BELLMAN & NORDHOFF, ARCHITECTS



VIEW OF REAR



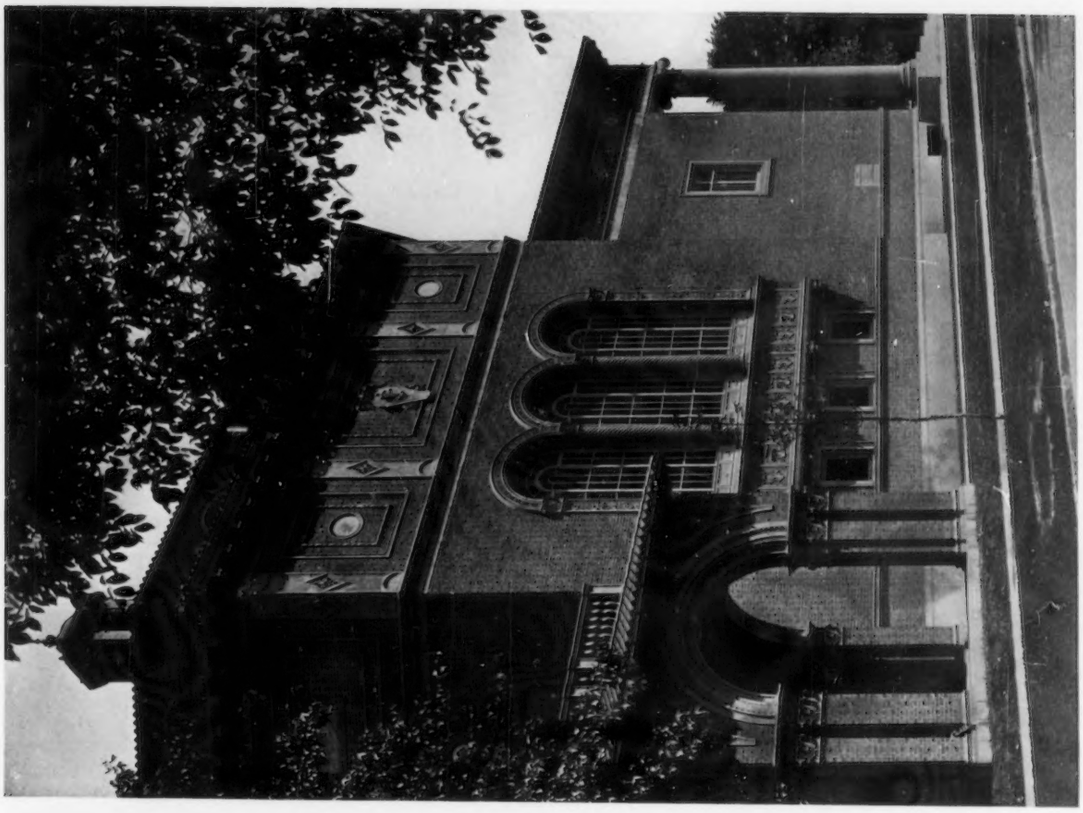
FIRST FLOOR PLAN



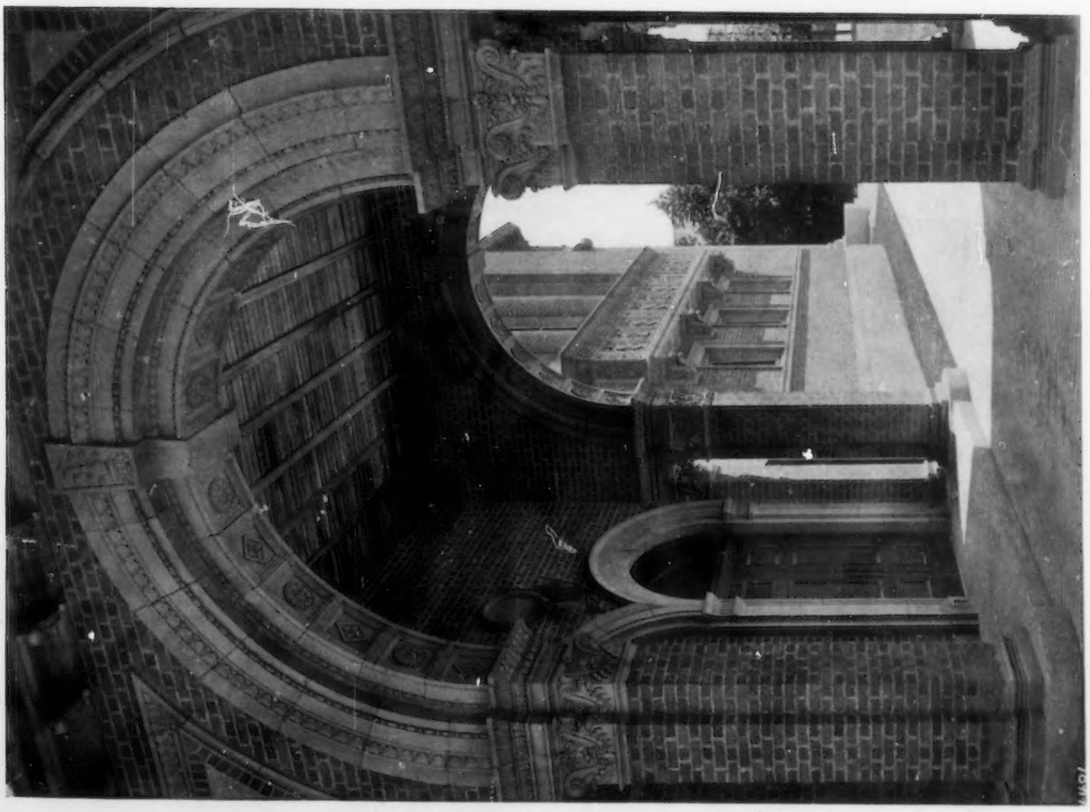
DETAIL OF ENTRANCE PORTICO

FIRST CONGREGATIONAL CHURCH, TOLEDO, OHIO

MILLS, RHINES, BELLMAN & NORDHOFF, ARCHITECTS



DETAIL OF SIDE ELEVATION



DETAIL OF PORTE COCHERE

FIRST CONGREGATIONAL CHURCH, TOLEDO, OHIO

MILLS, RHINES, BELLMAN & NORDHOFF, ARCHITECTS

INTERIOR VIEW LOOKING FROM CHANCEL

DETAIL VIEW OF CHANCEL

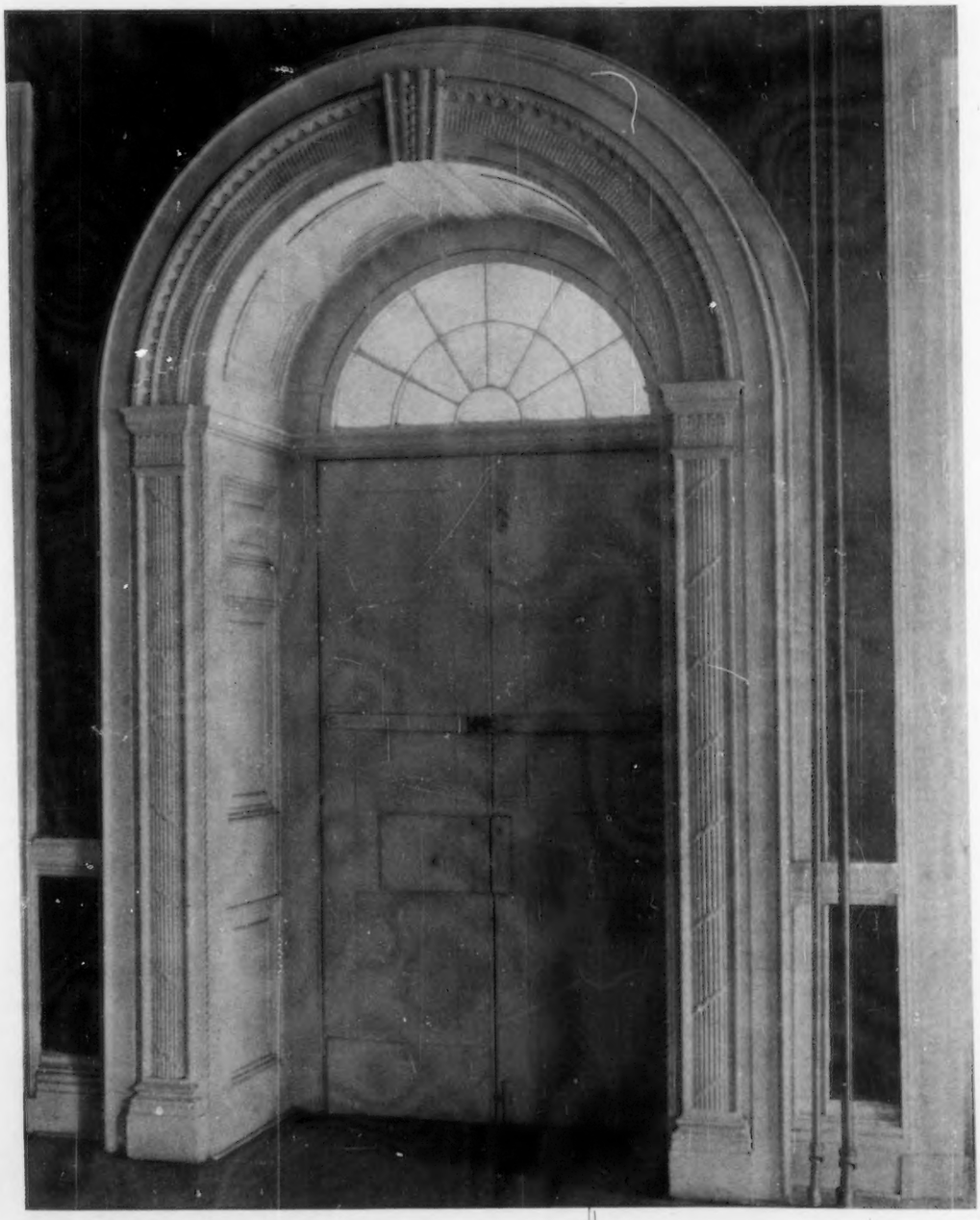
FIRST CONGREGATIONAL CHURCH, TOLEDO, OHIO

MILLS, RHINES, BELLMAN & NORDHOFF, ARCHITECTS

THE BRICKBVILDER COLLECTION OF

EARLY AMERICAN ARCHITECTURAL DETAILS

PLATE THIRTY-FOUR



INTERIOR OF ENTRANCE DOORWAY, BRADDOCK HOUSE, ALEXANDRIA, VA.

MEASURED DRAWING ON FOLLOWING PAGE

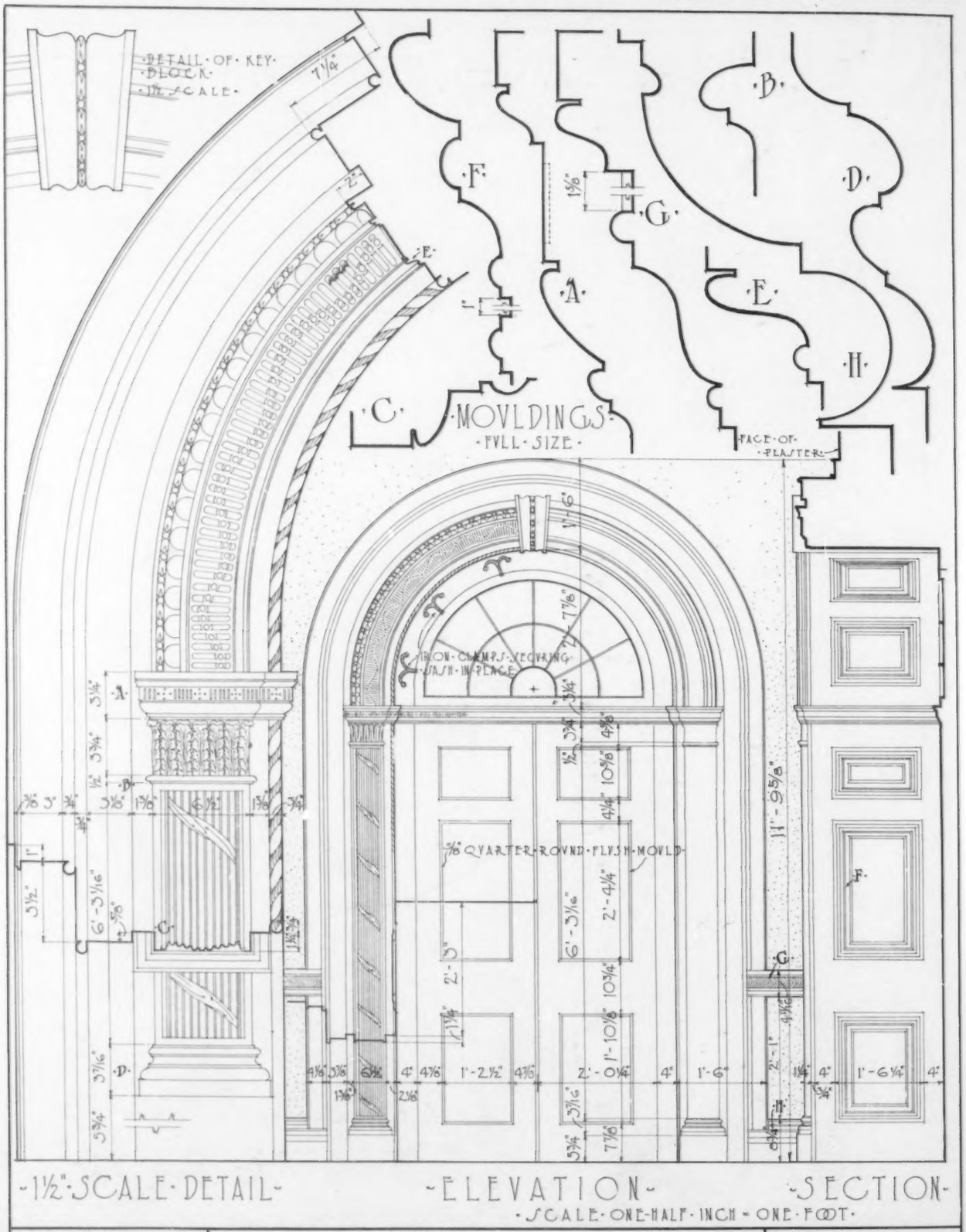


PLATE 34 DECEMBER 1916	INTERIOR DOORWAY ~ BRADDOCK HOVSE ALEXANDRIA VA BVILT 1752 - 1825 ~ BVILT BY JOHN CARLISLE	MEASVRED & DRAWN BY J.L. KELSTER ~ O.J. MVNSON & J.A. WEBER

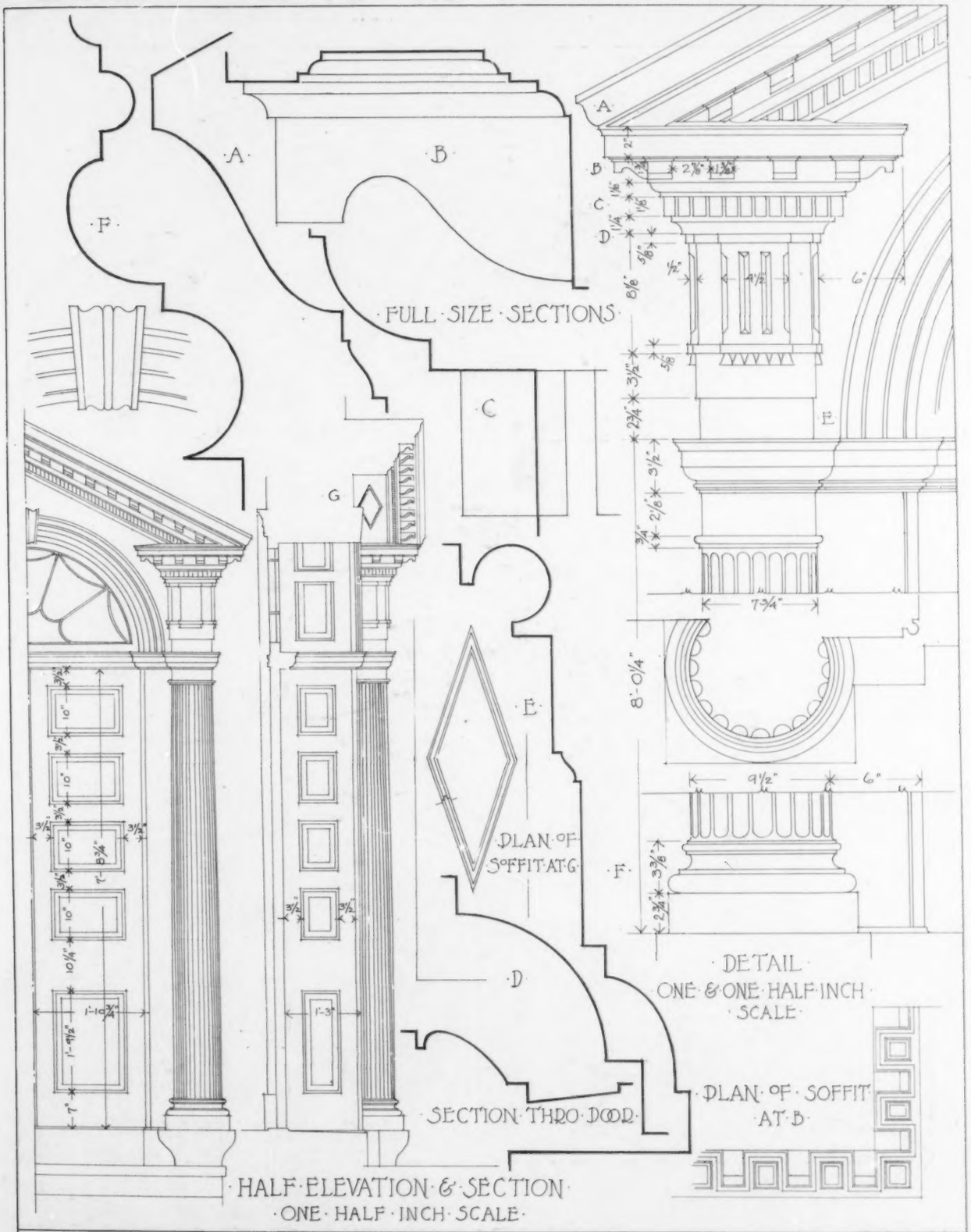
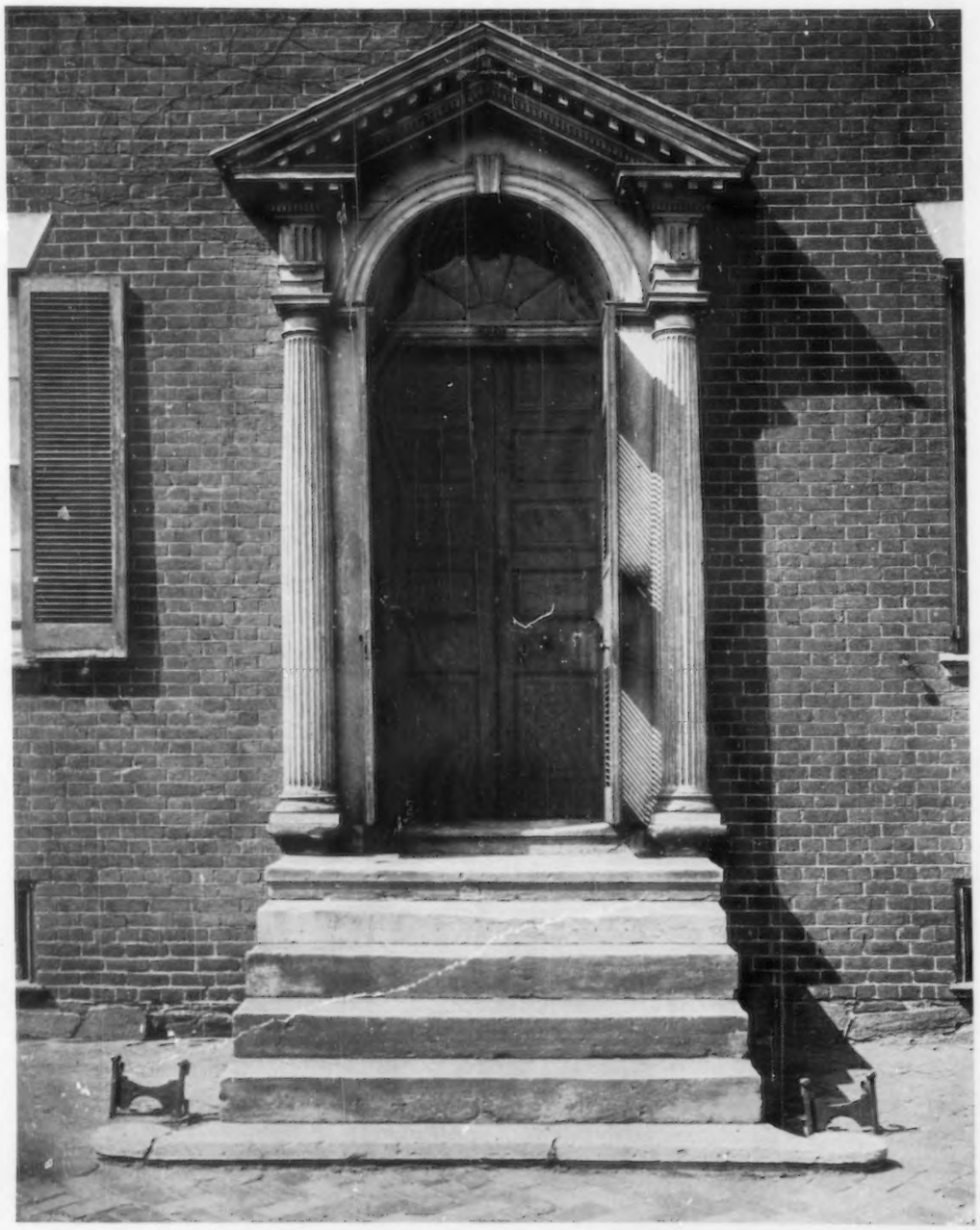


PLATE 35 DECEMBER 1916	DOORWAY · LLOYD HOUSE BUILT 1796 · ALEXANDRIA · VA	MEASURED & DRAWN BY RIGGIN BUCKLER

PLATE THIRTY-FIVE



ON Washington street, just around the corner from Christ Church in Alexandria, the Lloyd House is located. It was built according to the date on the leader head in 1796. The doorway is one of the best of the early examples in Alexandria. The detail is strictly classic, with none of the delicately carved members found on other work in this interesting old town.

A curious feature is the peculiar cutting of the stone plinths under the columns, reducing the width of the platform and giving the doorway a top-heavy appearance.

The interior of the house was unfortunately renovated in ante-bellum days and now contains little of interest in its architectural finish.

DOORWAY OF THE LLOYD HOUSE, ALEXANDRIA, VA.

Built in 1796

MEASURED DRAWING ON PRECEDING PAGE

Co-Partnership Housing in England

By ROBERT RANDAL

THE co-partnership movement in housing may be said to have received its first suggestion from a Frenchman. Godin, writing in 1880, outlined a scheme of "logements" from which all character of speculation should be eliminated. "It would be well," he says, "to organize it in such a way that the return on capital should be limited to a maximum of 4 or 5 per cent for example, and that the profits of this yielded by the apartments should be shared among the tenants in proportion to the amount of rents paid. This sharing of the rental revenue is calculated to attach the population to the success of the enterprise and to encourage them in sound economics." And it might be added, to solve the question of who shall inherit the unearned increment.

Here, then, briefly stated, are the fundamental principles of co-partnership as applied to the housing problem; and the difference from the other various methods by which workmen could gradually acquire their own houses is at once apparent. The property, instead of falling into individuals' hands, becomes a sort of trust in which all are concerned, and it is interesting to note that several of the English garden suburbs which are in no way based upon co-partnership principles were started with the object of enabling the workman to acquire the complete ownership of his house and land. It was realized, however, that insidious speculation would soon creep in; that the advantageous circumstances under which the houses were being built would tempt unscrupulous tenants to sublet at enhanced rentals, and that the objects with which the philanthropist founded the estate could thus easily be perverted.

But a co-partnership scheme goes farther than a philanthropic village trust, as it seeks to provide better conditions of living on the inhabitants' own initiative, and to treat external financial support as a purely business proposition to be remunerated at a reasonable and safe percentage. An attempt has been made to distinguish between a co-operative and a co-partnership housing society. The former is the more democratic organization in which the majority of the committee of management are tenant-shareholders, and in which the elections for the committee of management are in the hands of all tenants. On this basis have been devised many of the small independent estates, and it is a system well suited to mining areas where good wages are earned and outside financial help can be partly dispensed with. Co-partnership societies are taken to mean those in which a large proportion of the capital is subscribed by non-tenants, and as a result the representation of tenants upon the management committee is small; it is also to be expected that such an arrangement tends toward the establishment of a central organization with affiliated or offshoot estates.

The first society to be started in England was the Tenant Co-operators, Ltd., due to the energy of Mr. Benjamin Jones, manager of the London Branch of the Co-operative Wholesale Society. It was probably his object to make this new co-operative undertaking work in close relationship with the Wholesale Co-operative Societies, which at the time were reputed to possess about ten millions sterling of accumulated funds and to be in uncertainty as to how to dispose of them satisfactorily. Unfortunately in spite of Mr. Benjamin Jones' important position in the co-operative world, the wholesale societies do not appear to have realized that they owed anything to the working classes (*i.e.*, to themselves) beyond supplying them with cheap commodities, and were content to leave the supply of healthy and cheerful houses in the hands of speculative builders. Mr. Jones, so far as can be ascertained, received no support from them, and it would seem that it has required thirty years of education to make them see the power in improving their own conditions which they possess in these accumulated funds; their awakening may produce the biggest development in British housing that has yet been seen.

But there is, perhaps, another explanation of the failure of the Tenant Co-operators to appeal to the imagination of the older forms of co-operators, and also indeed of the general public. Their proposals related to housing and did not embrace the wider "town-planning" point of view. This is the more remarkable, seeing that the year of their incorporation, 1887, coincides with the founding of Port Sunlight, in which the necessity of *site-planning* in conjunction with *house-design* was laid down from the outset. The Tenant Co-operators contented themselves with the purchase of existing houses or the erection of separate terraces, in which none of the advantages accruing from a modern treatment of the site were possible. It may be urged that, without the support of the accumulated millions upon which they had relied, they were unable to launch out sufficiently to show the advantages of a departure from established methods of estate development, as Messrs. Lever Brothers were enabled to do at Port Sunlight. But this excuse will not quite cover the case, as it might have been possible to obtain an option upon a piece of land, and beginning in the most modest manner gradually to develop a community in which physical amenities were added to sound housing finance. As the Tenant Co-operators themselves confess, their "estates" did not possess the quality of "neighborliness"; "without a special meeting place, such as a men's and women's club, or some central institution, there has not been much opportunity for social gatherings beyond the ordinary half-yearly meetings. It cannot, therefore, be claimed that the spirit of co-operation is very strongly developed in the majority of tenants, or that altruism enters very largely into the mind of the average member of the society."

The next departure in the movement for co-operative housing was the establishment of the Co-partnership Tenants by Mr. Henry Vivian, and it is noteworthy that at the outset in 1902 the first estate at Ealing ignored the principles of site-planning and community grouping of buildings. But it was not long before its able director grasped the value of town-planning, owing to the object-lessons of Port Sunlight and Bournville, and possibly to the appearance of Ebenezer Howard's book on "The

Garden City" in 1898, though the major thesis of this work was outside the scope of these co-partnership estates. Nothing could testify more completely to the vitalizing effect of the modern town-planning movement than its result upon the Co-partnership Tenants, whose growth has been as rapid as that of the Tenant Co-operators has been stagnant.

The necessity for the treatment of the environment of the house as well as the house itself was recognized about the same time by two other organizations who both added the word "Town-planning" to their original names, "The National Housing Reform Council" and the "Garden Cities Association." It is an instructive lesson in the value of town-planning, as the complement of housing to visit the Ealing Tenants' estate and to compare their first efforts, where about one hundred houses face upon the ordinary "by-law"-governed roads, with the later work where the whole estate has been carefully laid out with a broad tree-lined avenue as its central feature, with sites provided for public buildings, open spaces formed, and existing trees preserved: where, in a word, the houses are grouped together so as to form a social organization, as well as a financial society.

At the same time it must be recognized that the Co-partnership Tenants' is a less democratic organization than the Tenant Co-operators' and has owed much of its success to the forceful domination of a single strong personality. Ostensibly, however, the financial organization of both are identical, for so successfully did Mr. Benjamin Jones and his colleagues draft their rules that the new society took them over *en bloc*, with the ready consent of their originators. Quite small modifications in the application of the same principles are sufficient to produce divergent results, and one such may here be noted: the Tenant Co-operators issued £1 shares, and a tenant need not take up more than one share; the Co-partnership Tenants issue usually £10 shares, and a tenant must ultimately take up five shares.

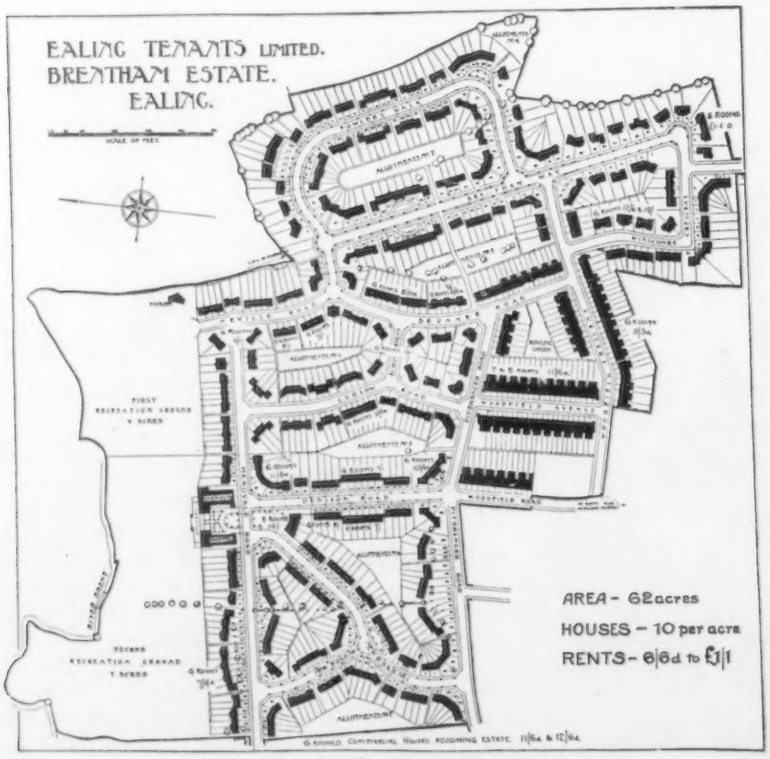
One of the principal features which has worked well, but which shows signs of having reached the limits of its success, is the arrangement of the co-partnership activities into a threefold interdependent group:

1. The Co-partnership Tenants Housing Council.
2. The Co-partnership Tenants', Limited.
3. The Federated or Affiliated Societies.

The first is a purely propagandist body and exists for the purpose of rousing public interest in the method of working, collecting, and tabulating statistics as to health and other matters upon co-partnership estates, and giving advice to groups of people in different parts of the country as to the best ways of starting a society; it also conducts a magazine called *Co-partnership*. The second is a business company registered under the Industrial and Provident Societies Act (1893) and is classed as a Public Utility Society, according to the definition in the Housing and Town Planning Act, "the rules whereof prohibit the payment of any interest or dividend at a rate exceeding £5 per centum per annum." Among the various usefulnesses of such a central financial body may be mentioned:

1. To provide expert advice, based upon accumulated experience of how to buy, lay out, and develop an estate.
2. To raise capital for such societies as join the Federation and accept its advice.
3. To pool, where practicable, all orders, so that the benefits of wholesale dealing in building materials shall be secured to the federated societies.
4. To organize and equip central workshops where standardized features may be manufactured in order to be able to compete with the speculative builder who buys his doors, windows, etc., ready made.
5. To maintain an architectural staff which is able, if required, to provide designs for the houses on the federated estates; they are not tied to them, but the staff frequently acts in a consulting capacity to local architects, giving them the benefit of wide experiences of similar work elsewhere.

The society in 1915 had a capital of £338,801, consisting of £10 shares carrying an interest of 5 per cent and loan stock at 4 per cent; and some idea of its financial value to the various societies in membership may be gathered from the fact that since 1907 (when it was registered) £1,060,672 has been raised for them by the parent body in shares, loan stock, bonds, and on mortgage. There are at present fifteen federated societies whose estates cover



Plot Plan of Co-partnership Estate at Ealing

804 acres and whose cost value as to land and buildings at the end of 1915 was estimated to be £1,603,904. When built up they will contain about 9,000 houses, at the rate of not more than twelve to the acre, and there will be about ninety-one acres of open spaces.

From these few facts may be gathered something of the nature of the general character of the undertakings. Turning to the detailed financial arrangements of each society, we find that the members consist of the ordinary shareholders and may be either tenants or not: if a tenant, he is required to take up shares to the value of £50* which he may do at once or acquire by instalments. Both those who pay the £50 down and those who avail themselves of the instalment method receive 5 per cent per annum interest on the amount paid up. In the latter case, instead of being handed over in cash, it is the practice to credit the interest to the tenant shareholder until his holding (including both cash payments and interest) has reached the minimum of £50, after which he can withdraw his annual interest in cash. The non-tenant investor must take up a minimum of £20, and in order that no member, whether resident or not, may obtain a dominating interest, all individual holdings are limited to £200. The Committee or Board by which the society is managed is annually elected by these shareholders.

The financial problem, as of course is the case with all building societies, is that the greater portion of contemplated expenditure falls into the first few years and actually takes place before any return from rents is possible. The amounts subscribed by intending tenants are manifestly inadequate to provide the necessary capital to make a start. It is therefore necessary to raise money by other means and one of the most important is by the issue of loan stock upon which no limit as to holding is placed. It is interesting to note that in the Hampstead Tenants, whereas the loan stock at the close of the first year (1907) was nearly double the share capital, in two years' time the proportion was

£19,950 shares,
£24,150 loan stock.

The following is a tabulated list of the methods by which the societies raise the necessary funds for their work:

1. Share capital, subscribed as mentioned above, both by tenants and non-tenants, limited to individual holdings of £200, and carrying a maximum interest of 5 per cent, dividends not being paid until all other claims are met.

2. Loan stock, subscribed either by members or outsiders, not limited in amount, and carrying an interest of not less than 4 per cent and not more than 5 per cent and redeemable at par. It is in this loan stock that the great co-operative societies might profitably invest their surplus capital, and it offers to individuals a safe investment with moderate return secured upon the land and buildings, with the additional attraction that the investor feels he is actively helping on a good work. Mr. John Burns, late president of the Local Government Board, once called such investors, somewhat equivocally, 4 per cent philanthropists.

3. Loans on mortgage borrowed from the Public Works Loans Commissioners. Public Utility Societies registered under the Industrial and Provident Societies Act, 1893, are able thus to borrow on the security of the land and buildings up to two-thirds of the value of their property, and, before the war, loans were obtainable for periods up to thirty years at 3½ per cent and up to forty years at 3¾ per cent. It is to be noted that such loans are only advanced for the erection of dwellings for the "working classes," and the following definition of them was recently put forward by the Commissioners:

"Mechanics, artisans, miners, and skilled or unskilled workmen or laborers, working for wages; hawkers, costermongers, and persons not working for wages, but working at some trade or handicraft without employing others except members of their own family, and persons, other than domestic servants, whose incomes from all sources do not exceed the sum of two pounds a week, and the families of any such persons who may be residing with them."

This is a singular and unsatisfactory definition, as it eliminates shop assistants, clerks, junior draftsmen, and others, who may be earning slightly more than £2 a

Portion of Plan of Co-partnership Estate at Hampstead

*These figures are actually taken from the Hampstead Tenants; they hold good with minor modifications for other societies.

week, but who, owing to the necessity of keeping up a more expensive degree of appearances, are just as much in need of help in their housing; the definition, on the other hand, includes mechanics, miners, riveters, etc., who can earn anything from £5 to £6 per week.

4. Loans on mortgage at short call. One of the drawbacks of borrowing from the Public Works Local Commissioners is that money is not advanced until the buildings are in existence. It is, therefore, necessary to negotiate loans at short call through banks, individuals, or lending agencies.

It is not necessary to labor the point how essential it is for co-operative housing societies to be able to raise sums of money outside those obtained from shares and loan stock; even one-third is a formidable amount for a society to raise, particularly if it is desired to keep the management as much as possible under the control of the tenants and not to be beholden to the outside investor. It is, therefore, interesting to note that in the Emergency Housing (No. 2) Act, 1914, which was introduced with the object of relieving possible unemployment in the building trades, a new policy was laid down. This act has never been made use of, for the simple reason that military service has counteracted unemployment; but there is reason to believe that its principles having once passed through Parliament may be later incorporated into legislation. This act empowered the local government board to make free grants of money to public utility societies for housing purposes to an amount not exceeding 10 per cent of the capital expenditure and to advance loans to 80 per cent of the value of the property, to be repaid on the annuity system in sixty years at 5 per cent. This leaves only 10 per cent instead of one-third of the capital to be found at the outset — a difference which would enormously increase the activities of co-operative societies. Another great help would be afforded by the state if advances could be made upon the buildings in course of erection. This would solve the issuing of short loans and simplify the financial arrangements.

Though it is usually the practice to begin paying interest upon the loan stock as soon as it is paid up, the estate does not, of course, produce any income until a certain number of houses are let. This income is then applied in the following order:

1. Interest upon loans, both government and "on short call." The government loan is also repaid by instalments, so that there is a continually reducing figure under this head.

2. Interest on loan stock, together, if thought desirable, with a sinking fund for the redeeming of the stock.

3. Repairs, upkeep, and administration of the estate; in the latter may be included the provision of buildings for social and educational purposes.

4. Interest upon the share capital subscribed by tenants and non-tenants.

5. Surplus profits. After the above have been paid, these are credited to the tenants on the amount of rent that they pay. These dividends upon the rent are not usually paid up in cash, but are added to the tenant's capital.

It is this last division of the profits which constitutes the chief advance of these methods of housing over those formerly practised. After paying all normal charges and allowing for social obligations, the unearned increment accrues to the tenant owner instead of to the landlord. Continued residence will mean an increased value to his holding, for as the years pass and the society's borrowed capital is gradually repaid, the time will approach when the estate will become the property of the tenant-shareholders. Besides this he can invest his savings with an interest of 5 per cent, and by the time that his holding in the society equals the value of the house and land, the interest which he receives will approximately equalize the rent he pays. This is a perfectly safe and singularly easy way of gradually acquiring the value of a house, and to all intents and purposes he is the sole owner of the house, though as co-partner he is part owner of many. Mr. Nettlefold in his book, "Practical Housing," has summed up the position in the following neat manner: "No member can say, 'This house is mine.' They can all say, 'These houses are ours.'"

The tenant enjoys numerous advantages not possessed by one who either rents a house from a landlord or who buys it outright:

1. The tenant is not bound to a house if his work calls him elsewhere. On giving due notice, it will be taken over by the society which bears any loss in having a house on its hands.

2. The tenant on leaving the house can either keep his shares in the society and draw his 5 per cent interest wherever he is, or if he likes he can sell them, provided the society does not wish to exercise its powers to pay out the holder at par.

3. While he wishes to remain at one house he has full security of tenure and cannot be turned out unless he fails to fulfil his obligations or proves a nuisance to the community.

4. If the affairs of the society prosper, he has a chance of getting a bonus upon his rent.

5. He has the use of the society's open spaces, which are provided as part of the definite policy of the movement.

6. The houses being designed by architects and not speculative builders offer more variety in arrangement and are sounder in construction.

7. He has an opportunity of sharing in the social life of the community and in the management, and generally feeling the advantages of neighborliness.

8. He has the advantage of a garden, which in varying size is attached to all houses, and, if he wishes to cultivate more land, allotments are provided.

9. His property, or his share in the common property, is not likely to depreciate on account of bad neighbors. It is well known that where houses are owned outright a foul owner will contaminate a neighborhood, and even in rented property the dirty tenant is not always ejected before he has damaged the surrounding amenities — in a co-partnership estate such individual plague spots are impossible.

10. The tenant has the advantage of an estate laid out upon town-planning lines, with all the features of grouping of buildings, careful road plotting, and preservation of existing features. And as an estate plan is prepared in advance he can judge what will be the general effect when the society's land is fully developed. He does not

run the risk of finding some objectionable building springing up in close proximity to his house.

From the point of view of the society, as owner and financial agent, the arrangements are satisfactory; there can be no bad debts on account of rent, as arrears can always be deducted from the tenant's share capital. And the investor has a good security through the large number of buildings over which his holding is spread.

Repairs are managed in several ways: in some societies external repairs are a charge upon the revenue of the society, and internal repairs done by the society are charged against the profit account of the tenant of the repaired dwellings; this method encourages carefulness, as each tenant is anxious not to curtail his share of the profits. In other societies all internal repairs must be done at the tenant's direct expense. Another practice is to set aside a fixed annual sum for repairs and at intervals to balance this up; if a tenant has had less than the average amount expended upon his house, the balance is credited him in shares.

Such is a general outline of the working methods of co-operative building societies and some of the advantages which their members enjoy. It has been suggested earlier that the organization of the Co-partnership Tenants, Limited, and the affiliated societies has shown signs of strain; it is the old story of an empire and its colonies gradually growing up into bodies capable of self-government. It is perfectly clear that in the early stages of the movement a strong central body was essential, and during the first years of a new society this central body can, with advantage, have a preponderance in the committee of management. Otherwise, if the control be in the hands of local tenant-shareholders, it might be possible for a clique consisting of members with the minimum share holding of £10 to obtain control over large sums and expend them injudiciously. But, on the other hand, it is urged that if the central body obtains a large amount of the share capital for a society and in return dominates its management, a kind of vicious circle is set up; the local tenants having little say in their affairs, local interest is not awakened, and local capital not forthcoming. It would be a simple matter for the central body to appoint a management committee in the first instance and then gracefully to efface themselves as the local offspring grew up. But the over-solicitude of parents is proverbial, and the very strength of character at headquarters, which was so valuable at the commencement, is apt to imagine that things will go amiss if its vigilance is withdrawn.

The Manchester Tenants, a small society possessing eleven acres at Burnage, is one of the most interesting for the purposes of study, both because the estate was completed in 1913 and because, though one of the societies affiliated with the Co-partnership Tenants, it has secured for itself a large measure of self-control. At present it is occupied in paying off the mortgage, after which it will redeem its loan stock. It has already declared a dividend on rents, but as these were small it was decided by the members to allow them to accumulate for a repairs fund. So long as rents remain stationary there will not of course be any increment value; but if the rents of similar surrounding property go up, there will not be any reason why new tenants should not pay a slightly enhanced rental—this will at once produce more marked profits for division among the tenants. The number of houses on this estate is one hundred and thirty-six, the area of open spaces two acres, and the cost of land and buildings £56,313.

The power of a society to raise the rents for its members was contested in a lawsuit by a member of the Penge Tenants (one of the Societies of the Tenant Co-operators). Mr. Justice Wright gave judgment for the Tenant Co-operators, basing it upon the phrase of the rule, "The tenant shall be charged a fair and usual rent for his occupancy of same" (*i.e.*, a dwelling). "On the whole," he said, "I think the proper interpretation is that which is also the natural interpretation, namely, that the tenant should be charged what is a fair and usual rent, *for the time being*, for his occupancy of the house." This rule, he pointed out, could be altered or rescinded by a vote of not less than three-fourths of a special general meeting at which not less than half the members were present. It is not likely that societies will raise the rents without very general agreement on the part of the tenants, but in this case it was found necessary to do so owing to increased charges on the property, mainly due to rates.

There are many small co-operative estates in England which through not being affiliated to any central body are comparatively little known: they usually possess a similar organization to that described, and with the slight alterations indicated in the conditions upon which loans are granted by the state there seems no reason why the movement should not spread very widely in the future. A small society at Hereford is worth mentioning as it shows how local authorities can co-operate to assist co-partnership schemes with the heavy charges in the early stage of their existence. Here the corporation actually bought the estate of nine acres for which they paid £1,500 and, after constructing the roads, handed it over to the society to build the houses. They refund the corporation within a certain term of years and thus ultimately become possessed of the freehold.

There is no doubt a great future before this housing policy in Great Britain and there must be a great value in these groups with their highly conscious citizenship, which in time will be found forming closely knit communities over the country. As yet the movement cannot be said to have touched the very poor, although at Hereford a tenant paying a rent of 4s. 6d. per week need only hold two £1 shares, and with 5s. 6d. per week, three £1 shares. But to the hard-working artisan class they offer many attractions and are an enormous improvement upon the old-fashioned building clubs.

Description of Fraternal and Secret Order Buildings

Masonic Temple, Worcester, Mass. Plates 186, 187. In this temple the architect has developed a building which expresses the atmosphere and dignity of the Masonic Order without reverting to the archaic forms of decoration which have so long been thought necessary to mark properly the façades of secret order buildings. Only once does a symbol appear, and that over the entrance doorway. The building is three stories high with basement and two mezzanine floors, and rises to a height of 70 feet. The exterior is characterized by the employment of a large scaled Ionic order and a vigorous handling of brickwork in panels and rustications. The first floor is devoted entirely to social purposes with all the rooms grouped on well defined axes. On the second floor the main lodge room is decorated in the Grecian manner with heavy Ionic piers and a painted ceiling and mosaic tile floor. On this floor in the rear there is a smaller lodge room called "The Middle Chamber" for the accommodation of purely routine business sessions. On the third floor the Chapter Room, extending through two stories with a gallery at one end, is carried out in the Egyptian style with a colonnade encircling its four sides and supporting a heavy beamed ceiling. The furniture in this and the Grecian Chamber was specially designed to harmonize with the architectural treatment. The armory on this floor is well designed for its practical uses. It is 24 feet high and its walls are lined with individual lockers for the members of the Commandery. They rise in two tiers, the upper one served by a gallery which encircles the room. The drill hall for the Commandery, which is also used for a banquet hall, is in the basement. It is 88 feet long and 44 feet wide and accommodates 440 diners.

Masonic Temple, Bennington, Vt. Plate 189. A narrow lot and buildings at either side influenced the plan and architectural treatment of this lodge building. The exterior is of water struck brick with concrete stone trim. The interior construction is of timber and the cost was 12 cents per cubic foot. The lodge room on the second floor extends to the full height of the roof and is treated with open timber construction in the Gothic style with leaded glass windows.

Elks Club House, Columbus, Ohio. Plates 191, 192. This building is situated on a corner lot 75 feet from one street and 60 from the other. The open space is treated with paved walks and a broad terrace on three sides of the building. The building is three stories in height, constructed of red brick with stone trimmings. In style it is a modification of Georgian Renaissance architecture, which affords a dignified, reserved, and imposing façade and at the same time conveys a domestic and homelike atmosphere. The main floor is given over to social purposes. The central portion of the basement is devoted to the heating and ventilating system, and the rear to a large grill room with kitchen and accessory rooms. The main portion of the second floor is occupied by the large banquet hall, which is provided with a stage and service rooms at one end. At the opposite end, a few steps above the floor, a balcony leads to a large reception foyer running across the front of the building which, when occasion demands, may be used in conjunction with the banquet hall increasing its seating capacity. The assembly hall alone seats 800. Directly over the banquet room on the third floor is the lodge room, wainscoted in wood and finished with an ornamental plaster ceiling.

Elks Club House, Baltimore, Md. Plate 195. The building occupies a lot 59 by 155 feet, with narrow alleys to the east and south and with no light privileges to the west. These conditions governed the plan and required the placing of as many day rooms in the front of the building as possible, utilizing the rear part of the building for the larger rooms, chiefly used in the evening. The assembly room on the first floor extends through two stories, and the mezzanine floor in the front portion is occupied by the billiard room and offices. The lodge room on the third floor extends through two stories. It is designed with a colonnade at each side on a raised dais. The columns support a segmental, vaulted, strapwork ceiling. The walls are paneled in soft, dull, finished oak. The mezzanine floor in the front, above this room, contains the card room and library, as well as the kitchen serving the banquet room on the floor above. The building does not have a general restaurant service, the kitchen being used principally in connection with the banquet room and the roof garden. The building is heated by steam, the larger rooms with an indirect system and with mechanical ventilation. A complete system of mechanical refrigeration is installed throughout with boxes in the bar, kitchen, storerooms, and floor service pantries. The exterior is constructed of a light, rough brick with the base and top story carried out in buff Indiana limestone. The construction is fireproof, being of steel and terra cotta flat arches. The building contains 728 cubic feet and cost $200,000 exclusive of furnishings, or 27½ cents per cubic foot.

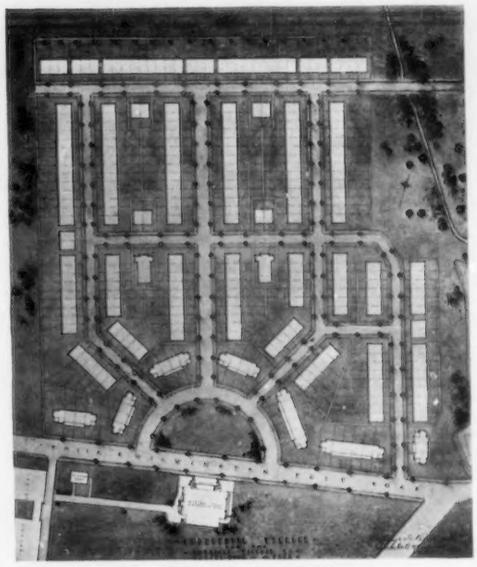
Knights of Columbus Building, San Francisco, Cal. Page 316. The exterior of this building is carried out in the Florentine style of architecture with sandstone of a greenish gray color, with a coat of arms in polychrome terra cotta. The soffit panels of the cornice are painted in colors to correspond with the coat of arms. The first floor contains an auditorium which, together with the gallery, seats 1,000 people. The second floor contains the large and small lodge rooms, as well as the club rooms for the order, and is reached through a separate entrance from the street. The main lodge is designed in the Doric style. The building is of fireproof construction on the first two floors and non-fireproof construction with metal lath on the upper floors. The total cost was $144,250 including architect's fees, or a cubic foot cost of 17 cents.

Club House Fraternal Order of Eagles, Buffalo, N. Y. Page 317. This building is located on a corner lot, 75 by 115 feet, one side of which is built up and the other with a 10-foot alley, allowing access to the rear entrance and court. The architecture follows the style of the Italian Renaissance and is executed in a light yellow gray brick and white terra cotta. The first floor is located 8 feet above the sidewalk level and contains the rooms devoted to the social or club side of the order. On the second floor is the lodge room of the order, 51 by 108 feet, with a gallery at one end.

An Industrial Village at Marcus Hook, Pa.

BALLINGER & PERROT, ARCHITECTS

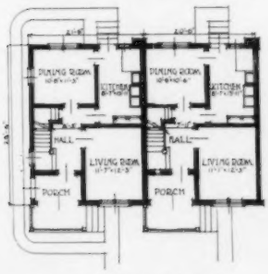
THIS group of buildings, comprising the industrial village connected with the plant of The Viscose Company, is located at Marcus Hook, Pa., upon a tract of approximately twenty acres, situated upon the Philadelphia & Wilmington Post Road, the main highway between Chester, Pa., and Wilmington, Del. It consists at the present time of two hundred and fifteen dwellings, two boarding houses, a village store, and a dining hall and recreation building. The buildings are the property of the company, and the management of the estate is under its control. For this reason the consideration of the æsthetic in planning the village entered as much into the problem as the disposition of the rooms in the houses, so that instead of the usual industrial village, with rectangular plots and long rows of uninteresting houses, there are streets diverging from a central plaza with pleasant vistas and a diversified architectural treatment of the buildings.



Plot Plan of Industrial Village

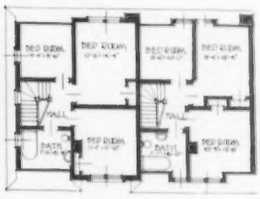
There are two classes of houses to accommodate the varying wages of the employees. Those surrounding the semicircular plaza have eight rooms and are occupied by the higher salaried employees. Those in the streets diverging from the plaza have in general six rooms and are rented for a smaller sum. The architectural treatment of the façades has been made different for each street. Permanent materials of construction have been used throughout; the walls are of brick, the roofs slate, and the porch floors of cement. Each house has a cellar and is provided with water and gas and an independent hot air heating system.

The fronts of the houses are terraced above the



First Floor Plan

Group of Typical Six-Room Houses



Second Floor Plan

Views of Street Façades Showing Different Types of Architectural Treatment

Exterior of Village Store

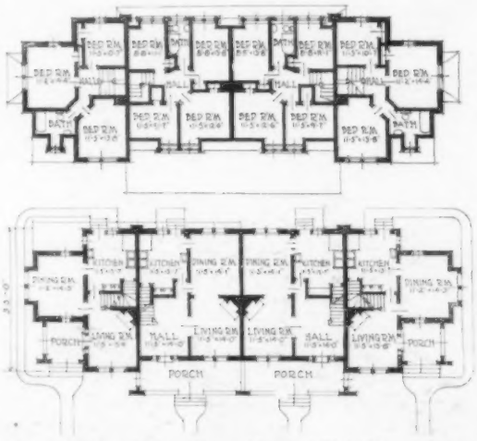
Plan of Dining Hall

Dining Hall and Recreation Building

street, and rows of trees are planted on each side of the streets. Hedges form the divisions between the front gardens and low iron fences between the rear plots. Separate storm and soil sewers have been provided for the entire property. The streets are macadamized, with cement curbs, gutters, and sidewalks edged with grass plots.

The village store is located at the end of the central street and is operated on the co-operative plan by the company. The boarding houses, one for men and the other for women, are located apart near the center of the village. Opposite the plaza the dining hall and recreation building is located and is intended for public entertainments, social occasions, and general recreational purposes. It is constructed of brick with stone and terra cotta trimmings and is of fireproof construction. A roof garden is provided with a floor of promenade tile.

The two hundred and fifteen dwellings were built at an average cost of $2,300. This includes plumbing, heating, gas piping and fixtures, papering and painting interiors, fences and sidewalks, and also a proportional cost to each house for main and branch sewers, curbs and gutters, macadam roads, and all other expenses except the cost of the unimproved land.



First and Second Floor Plans of Typical Eight-Room Houses

The average number of houses to the acre is thirteen. While the rentals are enough to cover expenses, the sum does not prove a large return on the investment. Returns in the form of contented help have, however, more than repaid the company, and that was its chief object.

Exterior of Eight-Room Houses on Semicircular Plaza

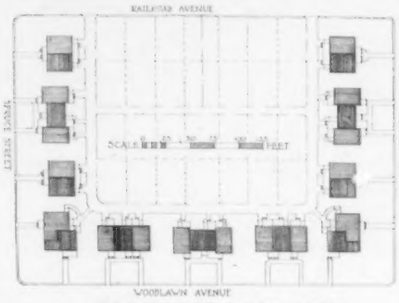
Workingmen's Houses at Massena, N. Y.

ALBERT H. SPAHR, ARCHITECT

AT Massena, N. Y., in the manufacturing community of the Pittsburgh Reduction Company, there has been built in the past few years a group of well constructed dwellings for the housing of the company's employees. Houses to accommodate one hundred and five families have been completed to date at a cost of $218,000, or an average cost per single house of $2,076. This figure includes furnace heat, good sanitary plumbing, electric wiring and fixtures, as well as all construction, finish, and painting. The houses vary in construction, showing different combinations of frame, brick, and stucco on wire lath construction with shingle roofs stained in various colors. The exterior wood finish is stained cypress with sash and frames of painted pine. The interiors are finished in stained cypress and plaster walls treated with water paint. Floors are hard pine, stained and varnished.

The land occupied by the development is divided into blocks similar to the one shown in plan herewith. The houses are placed on three of the frontages, leaving the fourth side open for convenient access to the open park-space in the center of the block which is divided into garden plots, one being allowed to each householder. The houses are owned by the company and rented to the tenants at a nominal figure. The streets and grounds are kept in order by the company.

The houses show considerable variety in their architectural treatment, and are designed with good regard for scale with one another and pleasing combinations of materials and colors. With the proper accompaniment of vines and growing gardens they will have an equal charm with the recent English industrial housing communities which have pointed the way for a solution of the workingman's home problem.

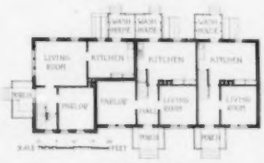


PLOT PLAN OF TYPICAL BLOCK

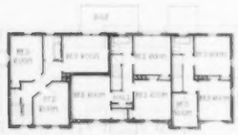
FIRST FLOOR PLAN

TWO-FAMILY HOUSE

SECOND FLOOR OF HOUSE AT LEFT

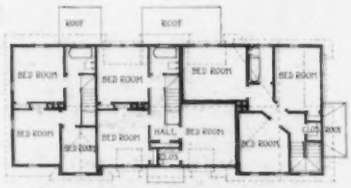


FIRST FLOOR OF HOUSE BELOW

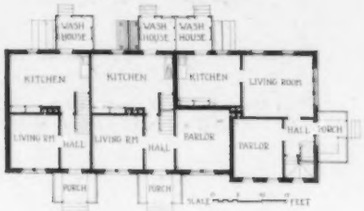


SECOND FLOOR OF HOUSE BELOW

EXTERIOR OF A THREE-FAMILY HOUSE

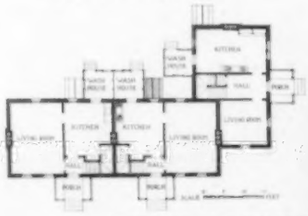


SECOND FLOOR PLAN

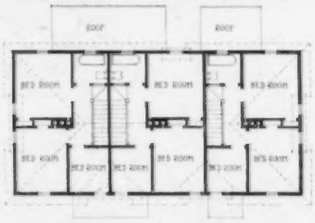


EXTERIOR AND FLOOR PLANS OF A THREE-FAMILY HOUSE

SECOND FLOOR PLAN



EXTERIOR AND FLOOR PLANS OF A THREE-FAMILY HOUSE



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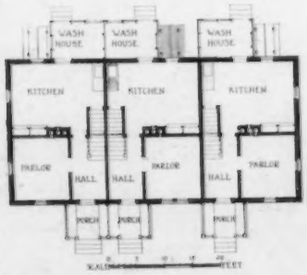
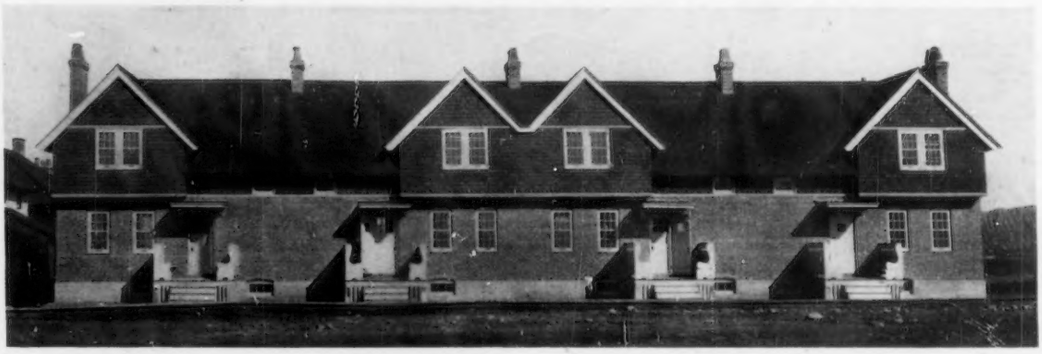
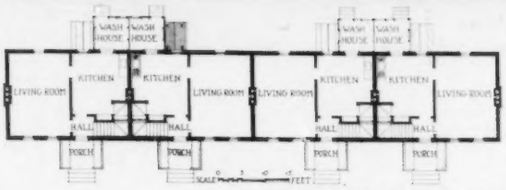


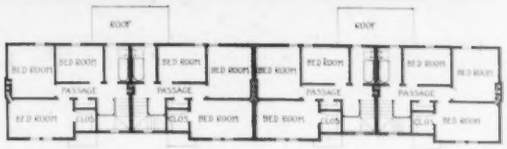
EXTERIOR AND FLOOR PLANS OF A THREE-FAMILY HOUSE

WORKINGMEN'S HOUSES AT MASSENA, N. Y.

ALBERT H. SPAHR, ARCHITECT

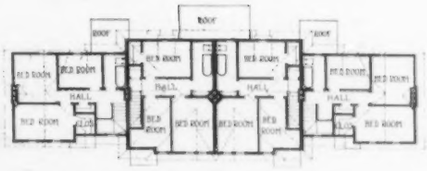


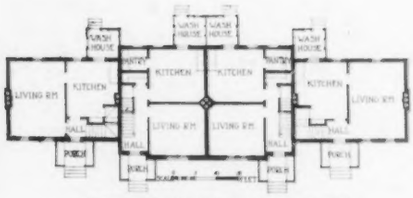




EXTERIOR AND FLOOR PLANS OF A FOUR-FAMILY HOUSE

EXTERIOR AND FLOOR PLANS OF A SINGLE HOUSE





FLOOR PLANS OF HOUSE BELOW

EXTERIOR OF A FOUR-FAMILY HOUSE

WORKINGMEN'S HOUSES AT MASSENA, N. Y.

ALBERT H. SPAHR, ARCHITECT

EDITORIAL COMMENT AND NOTES FOR THE MONTH

EFFICIENCY has come to be the watchword in business and manufacturing enterprises to-day, and the ease and celerity with which intricate transactions are carried on under its guidance prove beyond question its value. As a directing force it is steadily creeping into every department of American business. Its call is even now heard in the field of art, at least in one of the arts — the profession of architecture! That haven of the free and untrammeled artistic temperament — the drafting room — must soon bend to the new order. While to some that may sound like the death knell of creative design, it means, on the contrary, a greater opportunity for the appreciation of architecture by the public and a better and more virile expression of the art itself.

It is true, the old contention that because architecture is a creative art it cannot be conducted under exacting business demands is still maintained in many offices, but the success of those architects who have organized their offices on a systematic and efficient basis shows the absurdity of any such belief and points strongly to the fact that further progress of the architectural profession is dependent in a very large measure upon more efficient effort in the transaction of business affairs.

The banker, business man, real estate promoter, and nearly every other client an architect may expect to have looks for efficiency in his associates and systematic execution of detail in his business transactions. Why should he not demand the same of the individual or organization to which he has entrusted the design and construction of a building, representing to him an important business undertaking? It is only reasonable and logical that he should do so, yet architects have been loth to appreciate this viewpoint and have been content to develop one side of their profession — the artistic, to the neglect and detriment of the other, — the business. Surely one is as essential as the other, and no office can be said to be successful that executes architecture of a high order; but in doing so consumes an exorbitant amount of draftsmen's time, makes frequent changes as the work progresses, resulting in a large bill of extras, and finally showing in the architect's balance sheet a net loss to himself, instead of a profit out of commissions.

Much criticism has been directed to architects' offices, and in many cases not without reason, because of the inadequate and often contradictory character of specifications. This criticism does not apply to all offices, of course, but it does to a large enough number to make it a matter for serious thought. The condition is due entirely to lack of efficient office methods, and the great saving of time which is now wasted in repeatedly preparing duplicate specifications of a technical nature that could with reasonable study be reduced to standard forms, would be of advantage both to the architect and his client.

It is in the correction of such fundamental errors as those mentioned that efficiency will prove an able ally to the architectural profession. The adoption of efficient business methods does not mean an endless amount of "system" or "red tape" or an extensive group of clerks with varying duties of a non-producing order. It means simply the application of sound, common sense principles which have come to be recognized as essentials to business success, and which architects must recognize if they are to remain in command in the building world. Otherwise the day is not distant when architecture will be represented and created by departments of large contracting and development organizations which elect to recognize first, business qualities, and second, architectural ethics.

BOOK NOTES

MECHANICAL EQUIPMENT OF BUILDINGS. By Louis Allen Harding, B.S., M.E., and Arthur Cutts, S.B., New York, John Wiley & Sons, Inc. 6½ x 9 inches. 615 pages, leather. Price, $4.00 net. This is the first volume of a series of reference books for architects and engineers which will completely cover the field of mechanical equipment of buildings. If the standard set by this volume is maintained for the series, the work will be of practical value in the drafting room. The present volume deals with heating and ventilating and is comprehensively treated with chapters on the various methods of heating and ventilating, the combustion of fuel, correct construction of flues, pipe and valve fittings, heating of water in tanks and pools, cost of equipment, and the preparation of plans and specifications. Numerous diagrams illustrate points of the text, and tables are introduced wherever data can be tabulated. A special practical value has been given to the work by including manufacturers' data and definite descriptions of patented appliances now in general use. This feature of the work is representative, and it is not the intention of the authors to recommend in any way the appliances shown or described.

CITY RESIDENTIAL LAND IMPROVEMENT. Edited by Alfred B. Yeomans. Chicago, University of Chicago Press. 9 x 12 inches. 138 pages, cloth. Price, $3.00 net. This publication of the City Club of Chicago brings together in compact form the plans which were submitted in a competition conducted by that organization early in 1913 for the residential development of a quarter section of land on the outskirts of Chicago. As a contribution to the literature on town planning, it has a special interest because of the small area treated and the practical considerations involved which make the scheme more or less possible of being carried to completion. As will be recalled, a number of drawings were received, and a good many of the architects who have devoted time and study to the town planning movement were represented. Thirty-two of the competitive plans are illustrated in color and each is accompanied by an explanation from its author. The report of the jury of award is included and also a review of the plans by representative architects.

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